J. D. SPRECKELS, PREST. — A. B. SPRECKELS, VICE-PREST.
CHAS. A. HUG, SECRETARY. — W. D. K. GIBSON, TREASURER.
F. S. SAMUELS.

J. D. Spreckels & Bros. Co.

Capital Stock, = = = = = $2,000,000

Shipping and Commission -- Merchants...AND.. General Importers

San Francisco, = = = Cal.

★

Telegraphic Codes Used:

A. 1. Telegraphic
A. B. C.
Scott's
Agers

★

Cable Address:

"Spreckels"

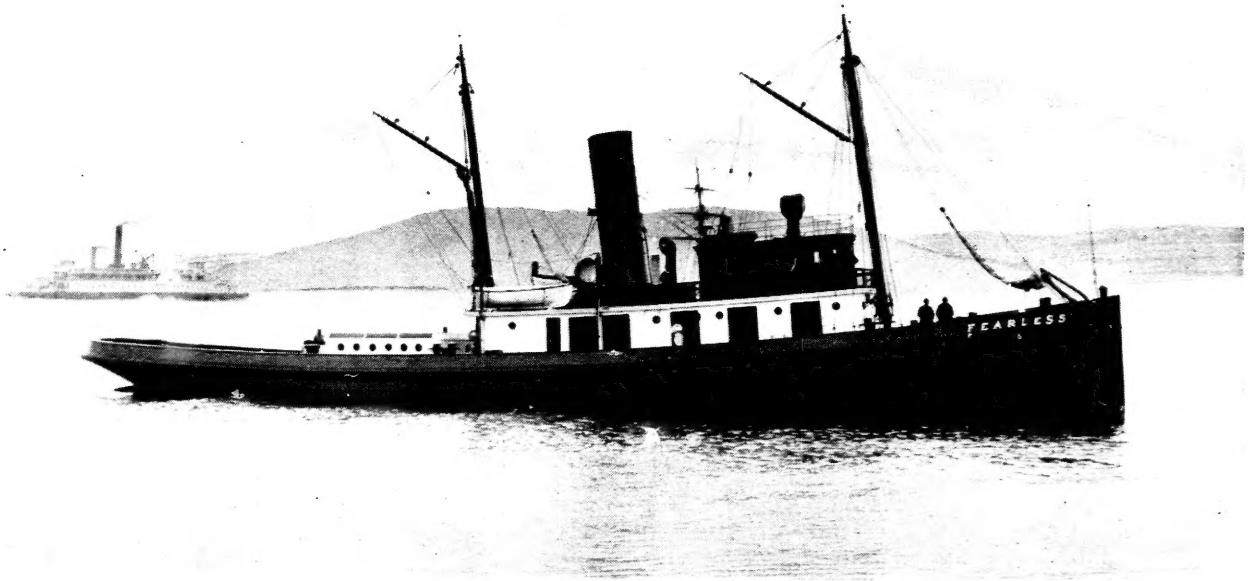
★

AGENTS:

Geo. Gray Macfarlane & Co., Glasgow
Macfarlane, McCrindell & Co., Liverpool
W. G. Irwin & Co., Limited, Honolulu
Spreckels Bros. Commercial Co., San Diego

AGENCIES:

Oceanic Steamship Company
Union SS. Company of New Zealand, Limited
Spreckels' Line Hawaiian Packets
Spreckels' Line Packets—Liverpool to San Francisco
Standard Marine Insurance Company, Limited
Union Insurance Company of Canton, Limited
John Fowler & Co., Leeds
Gillingham Portland Cement
Spreckels Bros.' Commercial Company, of San Diego
Hakalau Plantation Company
Wm. G. Irwin & Co., Honolulu



W. B. GOODRUM, PHOTO. J. D. SPRECKELS & BROS. CO.'S TOW-BOAT "FEARLESS." Length, 153 feet; Breadth, 26 feet; I. H. P., 1200.

J. D. Spreckels & Bros. Company.

TOW BOATS

Steel,	"FEARLESS,"	1,200 Horse-Power
Iron,	"RELIEF,"	700 Horse-Power
Steel,	"ACTIVE,"	600 Horse-Power
Iron,	"VIGILANT,"	550 Horse-Power
Wood,	"ALERT,"	260 Horse-Power
Wood,	"RELIANCE,"	270 Horse-Power

These Boats are fitted with Fire and Wrecking Pumps and all Appliances for Assisting Vessels in Distress.

THE "FEARLESS," "RELIEF" AND "VIGILANT" ARE IN CONSTANT READINESS FOR OCEAN SERVICE, AND ARE AVAILABLE TO VESSELS REQUIRING TOWS BETWEEN ANY PORTS ON THE COAST, AT REASONABLE RATES . . . . . .

COMPILED BY FRED'K S. SAMUELS,

OF

J. D. SPRECKELS & BROS. CO.

1894.

PRESS OF WM. C. BROWN CO.

PREFACE.

WE take pleasure in presenting this third issue of . . NORTH PACIFIC COAST PORTS to our friends interested in marine matters, feeling that its enlarged scope and general revision was made necessary owing to changes which have occurred during the past five years. If it can be found of service our object will have been attained.

J. D. SPRECKELS & BROS. CO.

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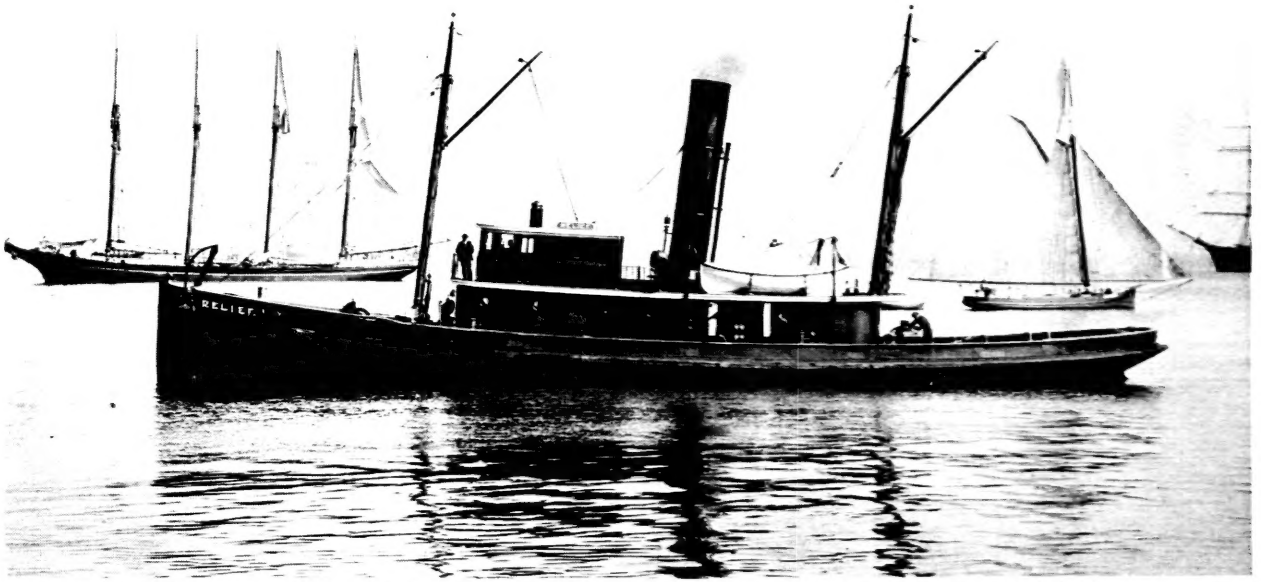
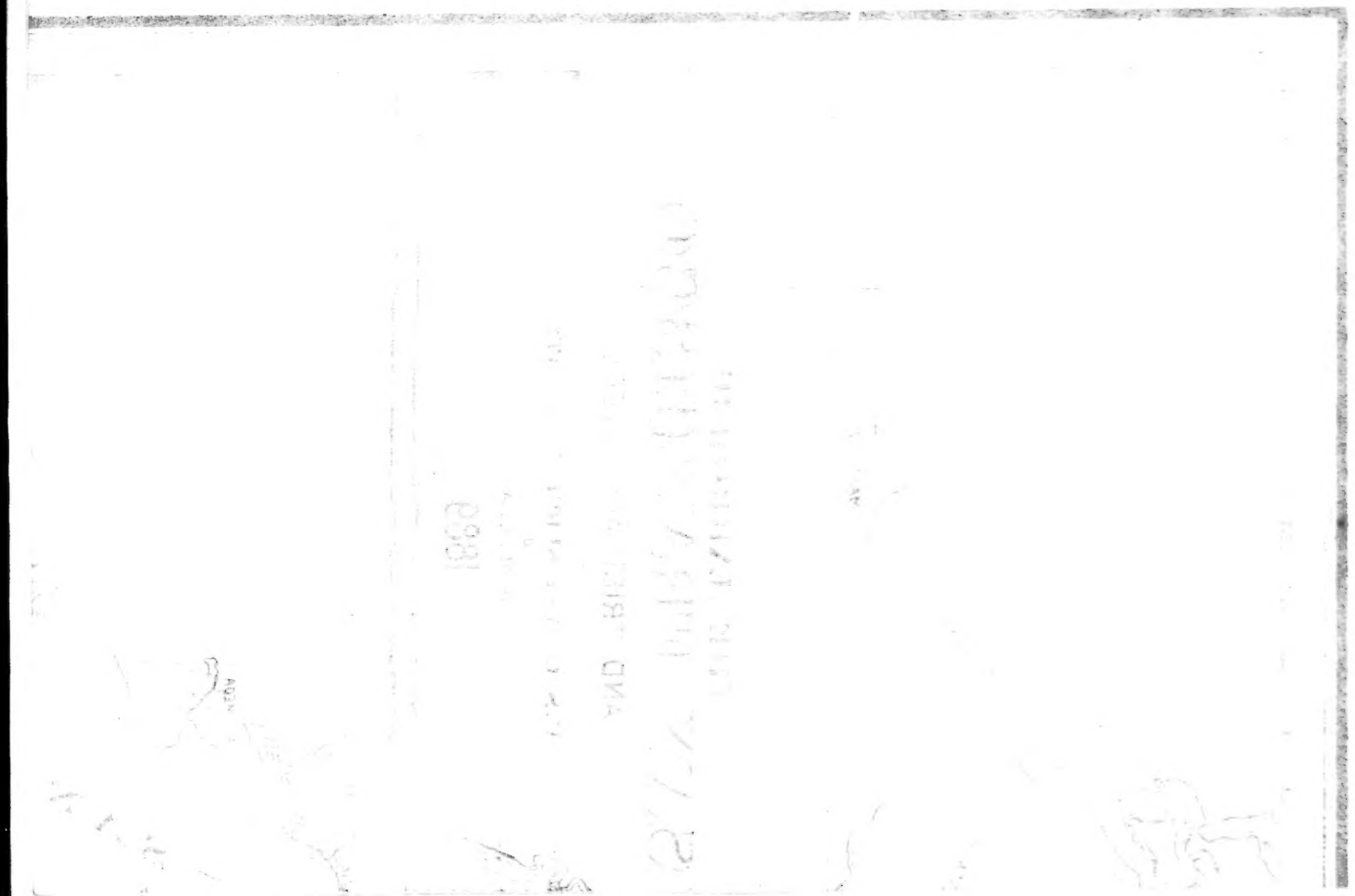
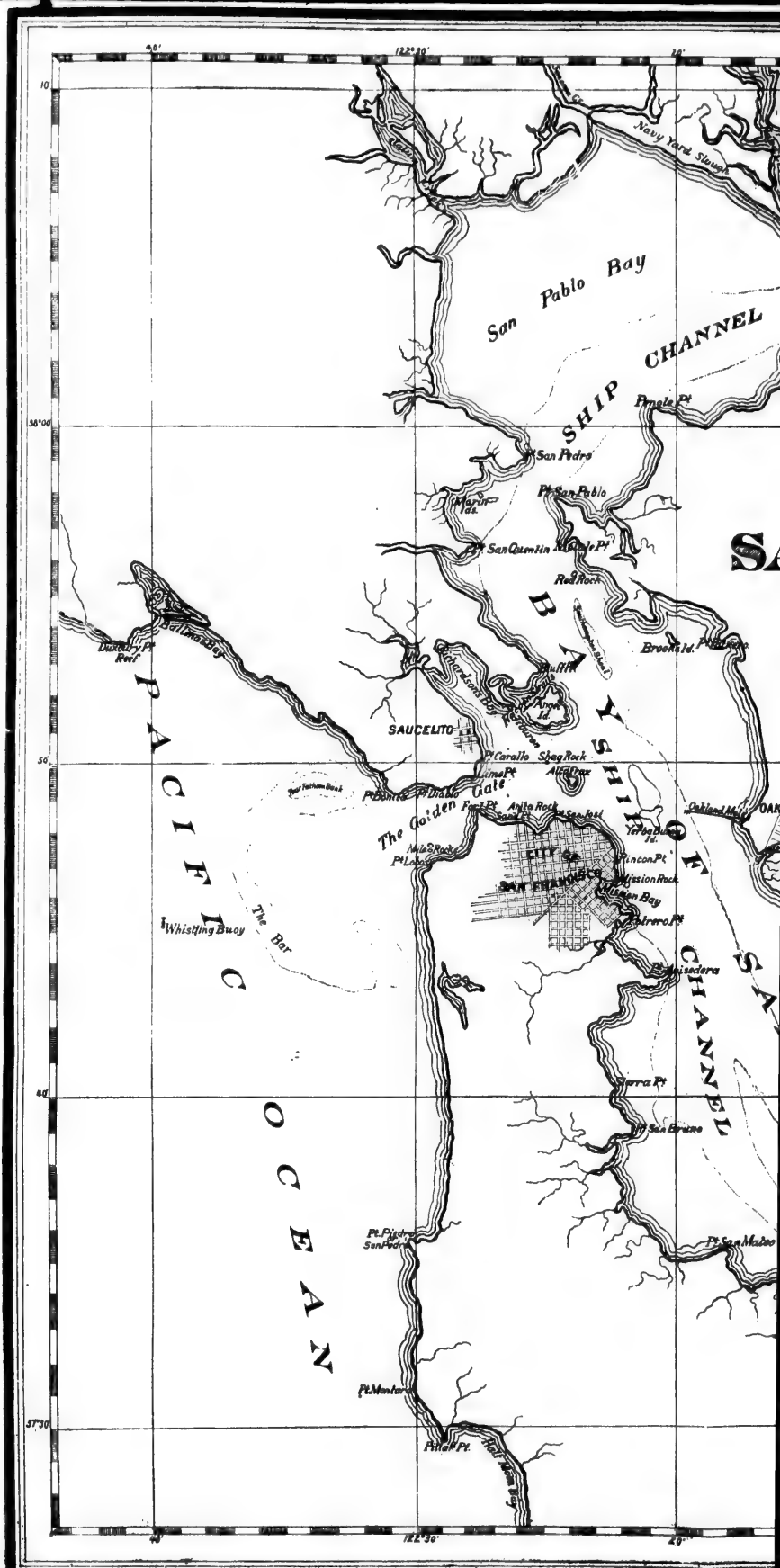


J. D. Spreckels & Bros. Co.'s Tow-boat "Relief." Length, 125 feet; Breadth, 22.5 feet; I. H. P., 500.

J. D. SPRECKELS & BROS. CO.'S TOW-BOAT "RELIEF." Length, 125 feet; Breadth, 22.5 feet; I. H. P., 700.




San Pablo Bay
SHIP CHANNEL
Navy Yard Slough
Pinole Pt.
San Pedro
Pt. San Pablo
Marin Is.
Pt. San Quentin
Red Rock
Brooks Id.
Point Bonita
Bullhead Bay
Duxbury Pt. Reef
Richardson's Bay
Raccoon Strait
Angel Is.
SAUCELITO
Pt. Carallo
Shag Rock
Lime Pt.
Alcatraz
Four Fathom Bank
Pt. Bonita
Pt. Diablo
The Golden Gate
Fort Pt.
Anita Rock
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Mile Rock
Pt. Lobos
CITY OF SAN FRANCISCO
Rincon Pt.
Mission Rock
Mission Bay
Potrero Pt.
Whistling Buoy
The Bar
PACIFIC OCEAN
Pt. Mussedera
SAN FRANCISCO CHANNEL
Sierra Pt.
Pt. San Bruno
Pt. Pedro
San Pedro
Pt. San Mateo
Pt. Montara
Pillar Pt.
Half Moon Bay
122°30'
37°30'

THE HARBOR OF
SAN FRANCISCO,
AND TRIBUTARY WATERS.
COMPILED FROM
U.S. COAST SURVEY CHARTS
BY
A. M. CLAY.
1889.
Statute Mile.
Nautical Mile.
Variation 16°40'
Pablo Bay
SHIP CHANNEL
Navy Yard Slough
VALLEJO
Mare Island
Commission Rock
BENICIA
Carquinez Strait
Pinole Pt.
MARTINEZ
Pt. San Pablo
Red Rock
Brooks Id.
Point Isabel
Shag Rock
Alcatraz
Oakland Mole
OAKLAND
BROOKLYN
ALAMEDA
Yerba Buena Id.
Rincon Pt.
Mission Rock
Mission Bay
Potrero Pt.
Pt. Lobos
Pt. Lobos
Sierra Pt.
Pt. San Bruno
Pt. San Mateo
Thompsons Landing
Ravenswood
SAN FRANCISCO BAY
SAN FRANCISCO CHANNEL

SAN FRANCISCO.

SAN FRANCISCO is situated in latitude 37° 48′ North and in longitude 121° 24′ West. It ranks third as a port of entry in the United States. It has a population of about 400,000. The mean annual temperature is 55 deg., the mean annual rainfall is 23.53 inches. The harbor, including tributaries, covers about 400 square miles. The lowest mean depth of water on the bar is five fathoms. Vessels can lie afloat at all stages of the tide at discharging or loading wharves. Vessels lying up awaiting orders can find safe anchorages at Sausalito, Oakland Creek or Mission Bay, out of the course of inward or outward bound vessels and harbor traffic. Having dry-docks and ship-yards capable of handling the largest iron vessels, repairs of any nature can be promptly effected. The Pacific Mail Steamship Company, North American Navigation Company and the Occidental and Oriental Steamship Company afford frequent means of communication with Mexican, Central American, China and Japan ports. The Oceanic Steamship Company has a monthly service with Australian and New Zealand ports, and fortnightly with Hawaiian ports, while numerous other steamship companies are actively engaged in the domestic trade.

Some idea of the commerce of the port is obtained from the returns for the past calendar year, 1893. There were 684 sailing vessels of 776,827 tons, and 312 steamers of 488,511 tons entered the port, and 615 sailing vessels of 692,330 tons, and 312 steamers of 498,415 tons, cleared during the year. All engaged in foreign trade. During the same time merchandise to the value of $40,246,608 was exported, and $19,850,382 in treasure, or a total of over $60,000,000, while the imports by sea from foreign countries were valued at $45,607,950.

DISTANCES BY SEA FROM SAN FRANCISCO.

	Miles.		*Miles.*
Mendocino	122	Seattle	804
Point Concepcion	227	Tacoma	850
Santa Barbara	262	Mazatlan	1383
Santa Monica	337	Acapulco	1836
Redondo	348	Honolulu	2100
San Pedro	358	Yokohama	4525
San Diego	440	Callao	4528
Coos Bay	400	Iquique	4986
Astoria	555	Valparaiso	5762
Portland	661	Auckland	6050
Port Townsend	766	Sydney	7200
Victoria, B. C	750	Melbourne	7740
Nanaimo	828	Hongkong	6100
Vancouver	833	Calcutta	9900

Rates of Commissions and Brokerage.

TO BE CHARGED WHERE NO EXPRESS AGREEMENT TO THE CONTRARY EXISTS

Adopted by the Chamber of Commerce of San Francisco, May 9th, 1871, as Amended to date.

Commission on purchase of stocks, bonds and all kinds of securities, including the drawing of bills, for payment of same	1	per ct.
On sale of stocks, bonds and all kinds of securities, with guarantee of sale, and remittance in bill	1	"
(But in this and all other cases where no charge is made for guarantee of Bill of Exchange, the party shall remit in first-class paper, without guarantee, unless the Bill be endorsed by him.)		
On purchase or sale of specie, gold dust or bullion, on amounts not exceeding $20,000	1	"
On purchase or sale of specie, gold dust or bullion, on any excess over $20,000	½	"
For drawing or endorsing bills of exchange	1½	"

On sale of bills of exchange without endorsement	1	per ct.
On sale of merchandise from domestic Atlantic ports, with guarantee	5	"
On sale of merchandise from foreign ports, with guarantee	7½	"
On goods received on consignment, and afterwards withdrawn, on invoice cost	2½	"
(The receipt of the Bill of Lading to be considered equivalent to receipt of the goods.)		
On purchase and shipment of merchandise, with funds in hand, on cost and charges, when not exceeding $2,500	5	"
On purchase and shipment of merchandise, with funds in hand, on excess over $2,500	3½	"
On purchase and shipment of merchandise, without funds in hand, on cost and charges	5	"
For collecting and remitting delayed or litigated accounts	10	"
For collecting general claims	2½	"
For collecting and paying or remitting money from which no other commission is derived	1	"
For collecting freight by vessels from domestic Atlantic ports, on amount of freight list or charter party	2½	"
For collecting freight by vessels from foreign ports, on amount collected	2½	"
For attending to general average matters and collecting contributions, on the first $10,000, or any smaller amount	5	"
on any excess over $10,000 to $30,000	2½	"
on any excess over $30,000	1	"
(A deposit to cover probable amount of contribution, or security to the satisfaction of the merchant attending to the matter, to be furnished by the claimant of goods.)		
For landing and re-shipping goods at this port from vessels in distress, on market value	1¼	"
(The merchant entitled to such commission being held in all cases to have assumed the responsibility of the safe keeping of the cargo, except as to damage resulting from natural accidents.)		
For accepting and paying a bottomry on respondencia bond	2½	"
(Interest to be also allowed for the time used.)		
On purchase or sale of vessels	2½	"

For entering, clearing and transacting ship's business on vessels with cargo or passengers:

on vessels under 500 tons register	$100
on vessels from 500 to 1000 tons register	150
on vessels over 1000 tons register	200

(If the vessel be chartered and cleared by different consignees, the commission not to exceed one-half of the above rates to each.)

For disbursements of vessels by consignees, with funds in hand	2½ per ct.
For disbursements of vessels by consignees, without funds in hand	5 "
For procuring freight or passengers	5 "
For chartering vessels, on amount of freight, actual or estimated, to be considered due when the charter is effected	5 "

(But no charter to be considered as effected or binding until a memorandum or one of the copies of the charter party has been signed. Where no special rate of exchange is stipulated on outward charters, payable in sterling, the pound sterling to be valued at $4.86 U. S. gold coin.)

On giving bonds for vessels under attachment in litigated cases, on amount of liability	2½ "
For receiving and transhipping, or otherwise forwarding goods, on invoice amount, on the first $3000, or any smaller amount	2½ "
For receiving and transhipping, or otherwise forwarding goods, on invoice amount, on any excess over $3000	1 "
For effecting marine insurance, when no commission for sale or purchase is charged, on amount of premium	5 "

The foregoing commissions to be exclusive of brokerage and every charge actually incurred.

Brokerage on purchase or sale of merchandise	1 "

CUSTOM HOUSE.

All vessels from foreign ports should, before anchoring, have two copies of the manifest, also three copies of list of all stores on board, ready for the boarding officer.

The following form for the heading of the manifest is strictly required, no matter if the cargo should only consist of coal or ballast:

Inward Manifest.

Br. Ship .....*Master.* .....*Tons Reg.* .....*Owners.*

Nature of Cargo and Marks.	Shippers.	Consignees.

The fine for violating this law is $500, which can be enforced.

Within twenty-four hours after arrival, the master of the vessel must report the fact to the Collector; and within forty-eight hours the vessel must be duly entered in the manner prescribed by law. The fine for non-compliance with this is $1000.

The master must produce to the Collector the register or other document in lieu thereof, with the clearance and other papers granted by the officers of the customs to his vessel at the port of departure for the United States; and within forty-eight hours after entry, to deposit the same with the Consul of the nation to which the vessel belongs, and deliver to the Collector the certificate of that officer that the papers have been so deposited. The fine for non-compliance is $500.

The papers thus lodged with the Consul can not be returned to the master until the production by him to the Consul of a clearance in due form from the Collector.

The time allowed in which to discharge the cargo of a vessel is as follows:

Vessels of eight hundred tons and upwards, fifteen working days. An extension of time is allowed by the vessel paying the wages, viz.: $4 per working day of the Inspector in charge.

Tonnage Tax.

Vessels arriving in the United States from any foreign port of North America north of the southern part of the Isthmus of Darien, or any port in Newfoundland, the West Indian, Bahama, Bermuda, or Sandwich Islands, will pay a duty of three cents per ton on every entry, but the total tax in any one year on entries from the ports specified is not to exceed fifteen cents per ton.

The tax on vessels from all other foreign ports is six cents per ton on every entry, but the total tax collected at six cents is not to exceed thirty cents per ton in any one year.

Bill of Health.

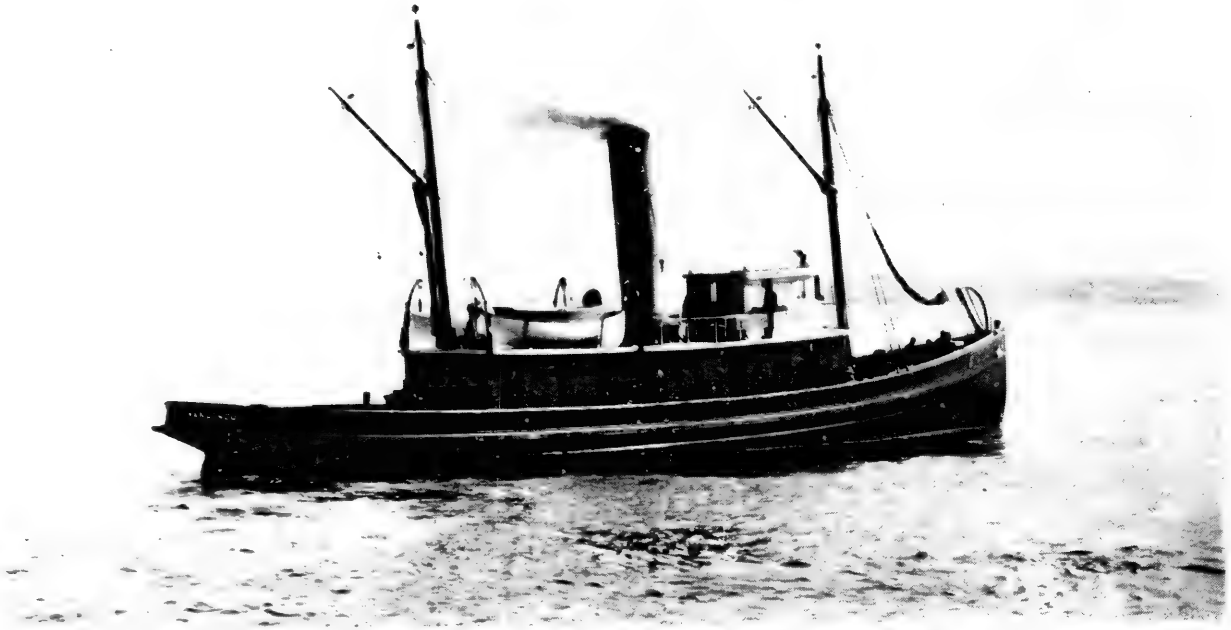
Vessels must have a bill of health from the U. S. Consul or Consular Agent at port of departure. The fine for not having same is $500.

Charges for Entering.

Survey,	$3 00
Entry,	2 50
Official Certificate and Oath,	20
General Order,	20

Charges for Clearance.

Clearance,	$2 50
Official Certificate and Oath,	20
Post Entry, if any,	2 00



J. D. SPRECKELS & BROS. CO.'S TOW-BOAT "VIGILANT." Length, 107 feet: Breadth, 21 feet: I. H P., 550 feet

PILOTAGE.

Rates are as follows: All vessels over 500 tons, $5 per foot draught, and four cents per register ton. When a vessel is spoken inward or outward bound, and the services of a pilot are declined, one-half of the foregoing rates shall be paid. In all cases where inward bound vessels are not spoken until inside the bar, the rates of pilotage and one-half pilotage shall be reduced fifty per cent.

When two or more pilots shall offer their services to any vessel inward bound, the pilot first offering, or the one connected with the same boat, must be given the preference.

TOWAGE.

There are two companies—J. D. Spreckels & Bros. Co. and Ship-owners' and Merchants' Tow-boat Co.—engaged in this business, whose rates at present are the same. Nearly all of the principal ship-owners have a contract with one or other of these companies for the harbor towage. The contract, however, does not include the towage *into* the harbor, the vessels being at liberty to accept the services of first or any tow-boat offering. There are usually two or three tow-boats cruising within a radius of forty miles from the harbor entrance. Vessels whose owners have not contracted for their towage are termed "Free," and the services of the first tow-boat speaking them (no matter to which company the tug belongs) must be employed, not only for the inward tow, but for all harbor work as well. "Free" vessels, consequently, have to pay higher rates than those under contract.

The cost of towage from sea to anchorage varies with distance and condition of weather, and ranges from $100 to $250. If wind and tide are suitable, vessels sometimes enter without assistance.

Under ordinary circumstances, the cost to a vessel of say 2000 tons net register for harbor work would be about as follows:

Docking City Front	$30 00
Port Costa to load	130 00
Port Costa to stream	130 00
Stream to sea	110 00

Vessels when going to sea, if weather is calm or winds unfavorable, frequently request an extra tow, *i. e.*, beyond the regular towage limits, this is arranged for by special agreement.

There is no port in the world wherein vessels will find a better tow-boat service, not only as to the power of tugs employed, but also with regard to promptness and general attention.

Hawsers.

On account of risk to both ship and tug, wire hawsers, unless they have at least 60 fathoms of manila spring of suitable size attached, will not be accepted by the tugs for towing.

DOCKAGE.

Berths are assigned in order of application, but vessels ready to discharge have preference over those ready to load.

Full rate is $4 for the first 200 tons, and three-quarters of a cent for each additional net register ton, and is to be paid by all vessels while discharging cargo. EXAMPLE: On a 2000-ton register vessel, dockage would be $17.50 for a day of twenty-four hours or any part thereof.

Vessels while taking in cargo, or receiving or discharging ballast, or lying idle, are subject only to half rates.

No deductions made for Sundays, holidays or rainy days.

Time counts from the hour when vessel makes fast. Vessels occupying outside berths, or engaged in making extensive repairs, are charged quarter rates.

To make room for vessels requiring immediate accommodation, idle vessels must haul or go into the stream at their own expense.

There is no charge for dockage on vessels loading at Port Costa or other wheat shipping points.

At Oakland wharf there is no charge while discharging. Vessels loading or idle pay half rates.

TOLLS.—The charge made for merchandise passing over the wharf is paid by the shipper or consignee.

WHARFAGE.—Charge made for leaving merchandise on the wharves longer than a specified time.

WEIGHING.

There is no charge made by the U. S. Custom House for weighing cargo. When coals are weighed by them the method is slow and very uncertain in its results, as only a small percentage is actually weighed in tubs on ship's deck, and the rest averaged. It has been found far more satisfactory to weigh the whole cargo on large

scales, which are tested and bonded by the Government officials, but which belong to private individuals. A Custom-house officer has full charge and direct supervision over the weighing; the ship is represented by its mate or clerk, and the owner of the scales is also at hand to check the weights. Carts, with a capacity of about 2240 pounds, load at the wharf, and are there given a numbered tag when leaving. These tags must arrive at the scales in rotation. Coals are either weighed directly alongside, or but a short distance away. For the use of the scales a weighing charge of 12½ cents per ton is made, of which amount the ship pays one-half. Freight is payable upon Custom-house weights in case of coal, pig iron, coke, and such class of goods. The question of shortage on coal cargoes is continually arising, and is the cause of much annoyance and loss to the importer, as well as the ship-owner. We have discharged many vessels at our own wharf, where every possible precaution is taken to ensure correct weighing, and yet the outturn is often disappointing. Vessels claim to leave port of loading with their full cargo complement as shown by displacement scale, and yet turn out one to three per cent. short. Of course, some of this shortage can be ascribed to evaporation of moisture during voyage; to a small loss through dust being blown away while discharging; and we regret to state that numerous cases have come to our knowledge wherein the cargo has been drawn upon for fuel during the voyage, the vessel's stores remaining untouched for future use. As modern sailing vessels make frequent use of their donkey engines while at sea, no inconsiderable amount of fuel is thus disposed of; but we cannot believe that the entire weight, as stated in bills of lading, is always shipped.

LOADING CARGO.

Vessels loading wheat or flour usually proceed to Port Costa, Vallejo, Wheatport, or other grain shipping points at the mouth of the Sacramento River. General cargo and barley are taken in at the city wharves.

Stiffening is furnished to a vessel under the following conditions, being the established custom of the port: The vessel having proceeded as far as possible with the discharge of her inward cargo, prepares space for the required stiffening, and then hands his notice to the charterer, endorsed by the surveyor, that the latter has found the vessel in fit condition for cargo.

1st. Charterers are entitled to 48 hours' grace after the vessel has served her notice.

2nd. Charterers are to be allowed one day for each hundred tons stiffening called for by the vessel.

3rd. Charterers are allowed 24 hours after final discharge before lay-days commence to count.

4th. A ship (if not in fault) need not be in loading berth to begin counting lay-days.

Example: A vessel requiring 300 tons stiffening would allow charterers six working days in which to supply same. If stiffening is not supplied within that time, then the vessel's lay-days commence on her outward charter, and they count right along, regardless of the fact that there is inward cargo yet to be discharged.

Should the vessel be put to any extra expense through the failure of charterers to supply stiffening within the proper time, charterers can be held liable for same.

Rainy days, legal holidays and Sundays do not count. Thirty working lay-days are usually stipulated for, though vessels frequently are loaded in much less time, depending mainly upon the supply of wheat at tide-water and state of market. Upon completion of loading, vessels go at once to an anchorage, there to await sailing orders.

STOWAGE.

As dockage is quite an important item in a ship's disbursements at this port, we offer the following suggestions for the guidance of those in charge of ships loading for San Francisco, in order to obtain dispatch, and make the dockage bill as low as possible:

Scrap Iron.

Scrap iron should always be stowed between the hatches, as by doing so it will greatly facilitate the discharging of the other cargo from the various hatches, and enable the ship to leave the wharf much sooner. Should the ship not be chartered, the scraps might be used as ballast in the meanwhile.

Salt.

Great care should be taken to stow this article by itself, if possible, and the iron stanchions parcelled with mats or canvas to prevent the bags from being soiled, and it should never be put on board until the coals, if any, are shipped, as the dust settles on the bags and causes claims.

J. D. SPRECKELS & BROS. CO.'S TOW-BOAT "ACTIVE." Length, 100 feet; Breadth, 22.5 feet; I. H. P., 600.

Rails.

Ships loading partial cargoes of rails should have them stowed in sections by themselves, to facilitate their being discharged at a separate wharf.

Coal and Coke.

Boards should be used, in all cases, to separate coke from coal or other cargo, instead of mats, which become rotten by the time the ship reaches this port, thereby causing claims against the ship by the rotten mats getting mixed with the coke $\frac{\text{and}}{\text{or}}$ coal, rendering it unmerchantable.

Bleaching Powder.

Mates or clerks receiving cargo should be instructed to reject casks containing bleaching powder or chloride of lime, unless thoroughly covered with tarpaulin to prevent the contents or vapor escaping from the casks, as they are so rotten upon arrival here that they will not bear handling. Even with this precaution it should be stowed in the fore peak and away from other merchandise.

Glass.

As there is much litigation about glass, too much care cannot be observed in receiving and stowing. Although the packages, when received, may appear in good order, their contents may be shivered to pieces by careless handling on steamers or railways before reaching the ship's

tackles; and as the ship will be held responsible for their delivery in good order here, some one should be appointed to shake each case, and, if necessary, to open it. Cases containing broken glass will rattle, and should be rejected. Cases of glass should always be stowed athwart ships, and on edge. No dunnage should be used, except in the wings to block off with; dunnage is frequently used to level off a place where a case would not fill up, the consequence is, that it works down among the glass and causes much breakage. Small cases should not be stowed alongside of large ones, as they are always sure to crack the glass in the large ones. Sand should not be stowed where it can come in contact with glass, as it will get into the cases and destroy its polished surface.

Coal.

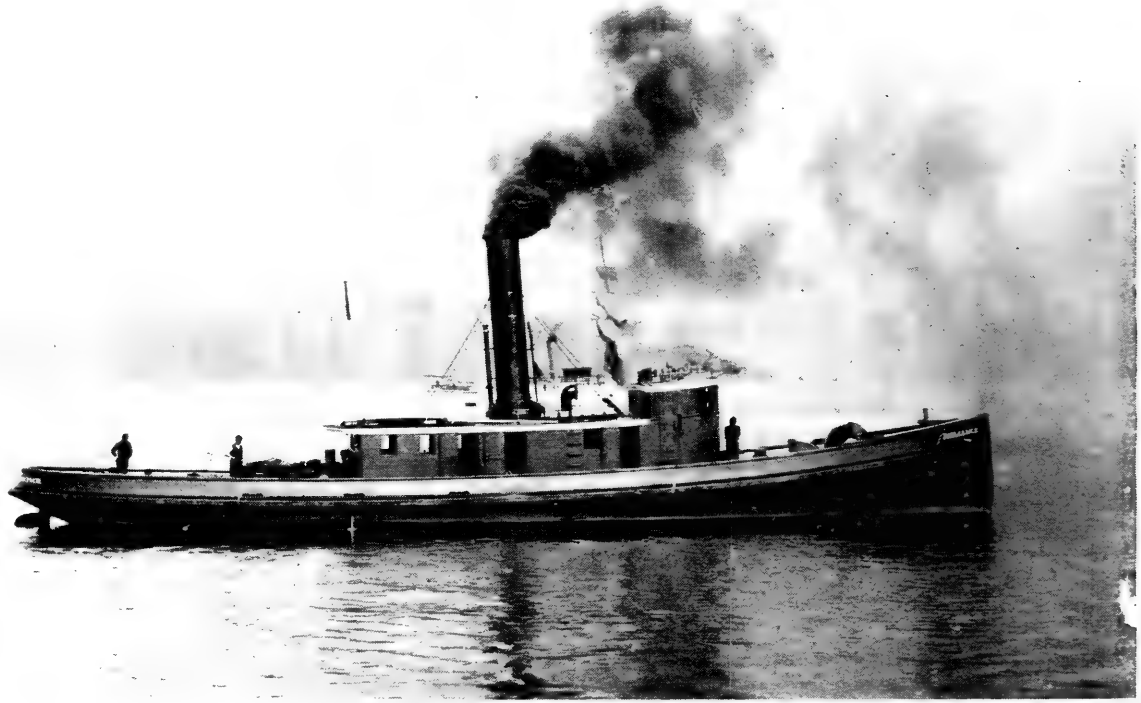
Every ship carrying bituminous coal should be supplied with a first-class portable force pump, one dozen coal baskets, one dozen best steel shovels, and two steel rods not less than eighteen feet long, of half-inch round, sharp pointed. In order to prevent the possibility of the coal taking fire without the knowledge of the captain, a rigid inspection of the hold should be made daily by the captain after the ship has been two or three weeks at sea. All the hatches should be kept off when the weather will permit, and the steel rods driven down in different parts of the hatches, as combustion takes place, in nine cases out of ten, in the hatchways where the coal has packed in taking in, and generally a few feet below the 'tween decks. By driving the rods down in a number of places daily, and allowing them to remain in each place ten or fifteen minutes, should combustion be taking place, the

rods will locate the exact place, when immediate action must be taken — discharge the coal overboard. This should be done by organizing the crew into two gangs, so that when one gang gets tired the other may relieve them, as there should be no stoppage of work until the fire is reached and extinguished. If the hold is closely watched, you have forty-eight hours after the first indications are observed, which are, viz: strong smell of coal gas, and almost imperceptible wreaths of smoke issuing from the coal above where the combustion is taking place. Should it happen between the hatches, which is scarcely probable, holes can be bored through the deck, and the rods driven down so as to locate the fire; should it be found near the bottom of the ship, we would advise pumping sufficient water in to put the fire out; should it occur midway in the lower hold, discharge the coal overboard until the fire is reached.

Captains should remember that battening the hatches down will not extinguish coal on fire, for just as it reaches a certain degree of temperature the gas confined explodes, and the stronger the ship the greater the explosion.

STEVEDORE RATES.

General merchandise, weight and measurement, per ton,	$0 37½
Coal, pig iron and ballast, per ton,	37½
Steel blooms, glass, sheet and bar iron,	50
Sulphur and shale in quantities over fifty tons, per ton,	50
Railroad iron, coke and bricks, per ton,	70
Scrap iron, per ton,	1 00



J. D. Spreckels & Bros. Co.'s Tow-boat "Reliance." Length, 92.2 feet; Breadth, 21.2 feet; I. H. P., 270.

Loading.

Wheat, flour, borax in bags, ton of 2240 lbs., ...	37½
Barley, per ton of 2000 lbs., ...	37½
Salmon and fruits in cases, per ton (2240 lbs.) ...	50
Orchilla, cotton, pulu, in small lots of 2240 lbs., per ton, ...	50
Lumber, per M, according to size, from $1 00 to 1	25

Subject to discount of from 15% to 20% under contracts.

PORT WARDENS.

There are four Port Wardens appointed by the Governor of the State. Two or more must be master mariners, who neither directly nor indirectly are interested in insurance, vessels, cargo, or repairs, that they may be required to survey. It is their duty to survey vessels coming in in distress, or having sustained damage at sea; to survey hatches, stowage and cargo of all vessels laden with general merchandise. The records of such survey to be kept open for inspection of all concerned, and copies of same to be furnished when desired. In all surveys made by them they shall set forth clearly the nature of the damage, if of merchandise, whether from actual contact with sea-water, or through excess of water in the hold, or from humidity or sweat, bad stowage, or from such other causes as in their judgment the damage has been occasioned by. For each survey they are allowed to charge $15. It is unlawful for any person or persons other than the Port Wardens appointed, according to law, to perform any of the duties prescribed by this law, under a penalty of $1000.

The report of a Port Warden is invariably accepted as conclusive, and much annoyance, expense, and tedious litigation is often prevented by employing them. In particular cases a meeting of the whole Board can be called.

REGULATIONS FOR LOADING GRAIN CARGOES.

Wooden Ships.

Dunnage in the bottom to be not less than ten inches on the floor, and fifteen inches at the bilge.

Dunnage and sides to be clapboarded from the keelson to the upper deck shelf.

All decks to be dunnaged with strip and board two inches high.

Sufficient covering to be laid over the bottom as high as the upper turn of the bilge, all fore and aft, to prevent the loose grain getting to the pumps.

Three tiers of shifting boards two inches thick, to be placed on each side of the stanchions, abreast of each other in each of the 'tween decks, in three-decked ships, and ships with two decks to have two tiers in the lower hold in addition to those in the 'tween deck.

In vessels where no manhole is fitted to get to the pumps, a proper communication is to be left through the cargo to get access to the pump well.

Iron Ships.

Dunnage in the bottom to be not less than six inches on the floor, and ten inches at the bilge. Lower hold to be lined with boards from the keelson to the lower deck beams.

The sides of the 'tween decks, if fore and aft battened only, the space between the battens to be filled in with boards.

Where vertical battens are fitted over the fore and aft ones, thick mats may be used in lieu of the boards before mentioned, but in the absence of mats, additional vertical battens are to be fitted between the original ones.

Where the 'tween deck is laid and caulked, with combings fitted around hatchways, the deck to be dunnaged with strip and board two inches high; but where the deck is open, the gutter waterway only will require to be covered with a fore and aft board.

In all cases where a vessel has carried salt or other cargo which leaves a permanent dampness in the deck, it is to be dunnaged in the same manner as a laid deck.

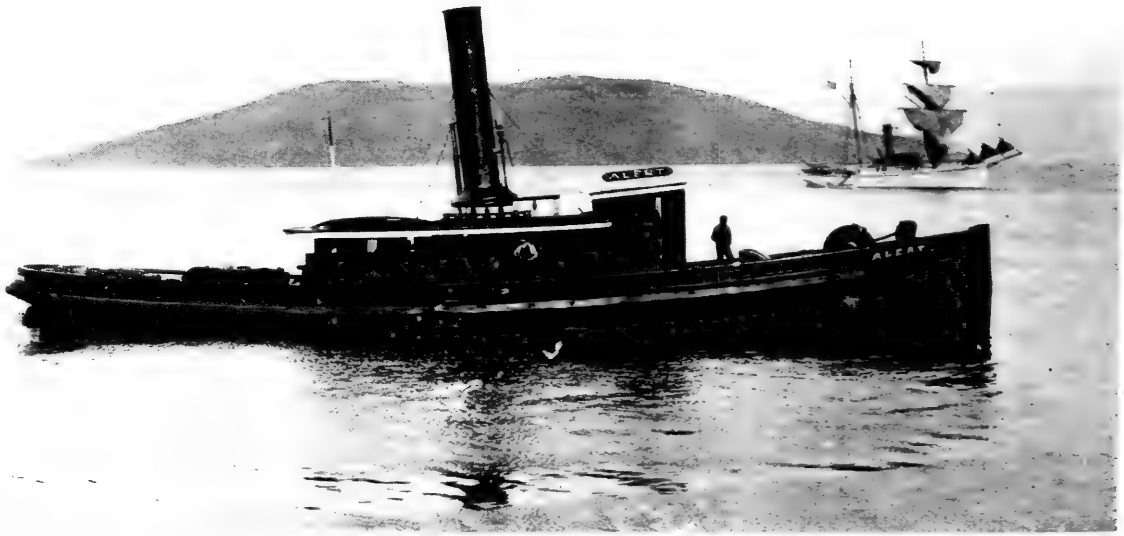
Covering of bottom, arrangement of shifting boards, and passage to pump well to be as prescribed for wooden ships.

DRY DOCKS.

There are two large docks, one a basin, the other a hydraulic lifting dock belonging to the Union Iron Works, of the following dimensions: 66 feet wide, 460 feet long. Rates are as follows, vessels only being allowed to work twelve hours against one day's dockage:

On Steamers, on Gross Tonnage.

	FIRST DAY.	LAY DAYS. MINIMUM $50.00.
From 100 to 1000 tons	60c per ton.	30c per ton.
" 1000 " 2000 "	50c " "	25c " "
" 2000 " 3000 "	40c " "	20c " "
" 3000 " 4000 "	30c " "	20c " "
" 4000 " 6000 "	20c " "	20c " "



J. D. SPRECKELS & BROS. CO.'S TOW-BOAT "ALERT." Length, 85.2 feet; Breadth, 20 feet; I. H. P., 260.

For Sailing Vessels, on Net Register Tonnage.

	FIRST DAY.	LAY DAYS. MINIMUM $50.00.
From 100 to 500 tons	50c per ton.	25c per ton.
" 500 " 1000 "	40c " "	20c " "
" 1000 " 2000 "	$400.	20c " "
Over 2000 tons	20c per ton.	20c " "
Cleaning and painting only	20c " "	10c " "

Cargo charged for at same rate as tonnage. No charge for ballast. Wrecked vessels subject to additional charges.

Cleaning and Painting.

The estimated cost of cleaning and painting a vessel of 1700 tons register, say to 12-foot mark, with one coat of red lead and zinc, of best quality, and one coat of zinc and tallow, would be for labor and material, $275.

If the ship furnishes the material, the labor would be about $150.

To paint with Holzapfel's Composition, one coat of priming and one coat of anti-fouling, the cost would be $390.

If the ship furnishes the material, the cost for labor would be about $125.

The cost for a 2500-ton vessel would be about from twenty-five to thirty per cent. more than the foregoing.

The entire work could be finished in from nine to twelve hours.

The total cost for cleaning, painting, including towage and dockage:

For a 1700-ton vessel would be from $750 to $865, according to paint used; for a 2500-ton vessel would be from $850 to $965, according to paint used.

SHIP'S CLERK.

A competent man should always be employed by general merchandise vessels to deliver cargo; the mate can assist in tallying. The charge for such services should not exceed $6.00 per day. No goods should be allowed to leave the wharf without a clean receipt. All cargo remaining on wharf after 5 P. M. each day can be stored by vessel at consignees' expense, provided proper notice had been given. A clerk is not necessary for rough cargo, such as coal, coke, pig iron, but should one be employed the charges would be from $3.50 to $4.00 per day.

MISCELLANEOUS.

BALLAST.—From seventy to eighty cents per ton of 2000 pounds put on board, according to location of vessel.

DOCKS.—Vessels lie afloat at any stage of tide.

OAKLAND WHARF.—No dockage charges while discharging; half rates are imposed on vessels loading or idle.

WATER.—One-half cent per gallon.

Following is disbursement account of British Ship 1825 tons net register, J. D. Spreckels & Bros. Co., agents; arrived July 26th, 1893; sailed Sept. 15th, 1893. Time in port, 52 days. Inward cargo 2750 tons cement; outward cargo 2825 tons wheat. Average disbursement per ton register 12 7.

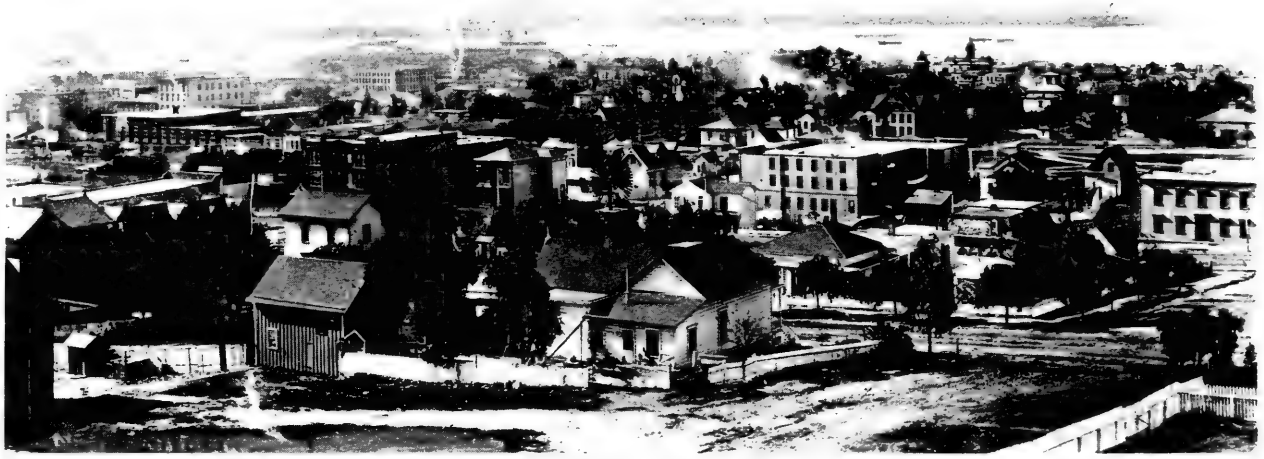
To Cash, Captain	$50 00
" The "Guide," reporting	1 00
" Merchants' Exchange, reporting	5 00
" Pilotage, inward	180 50
Carried forward	$236 50

Brought forward	$236 50
To Br Consul, entrance fees	3 15
" "Commercial News," advertising	5 00
" Quarantine fees	7 50
" Customs entrance fees	5 70
" " tonnage duty	109 50
" J. D. Spreckels & Bros. Co., towage	110 00
" Cash, Captain	370 00
" Dockage at Section 4, Sea-wall	194 40
" Dockage at Third Street	137 70
" Medical service	40 00
" Dockage	64 80
" Clerk	101 00
" Board Harbor Com., removing gravel	3 00
" J. D. Spreckels & Bros. Co.'s commissions inward freight, $7260 @ 2½%	181 50
Port agency	100 00
Freight advanced in London, £756 5s 0d @ $4 80	3,630 00
" Lining ship	40 50
" Commission on inward freight, 6 bbls. cement, $2 82 @ 2½%	07
" Clothing, etc	262 70
" Stevedore	1,612 16
" Stores	79 10
" Drugs	13 85
" Surveyor	35 00
" Meat	270 10
" Rating chronometer	8 00
" Lighterage	5 00
" Towage	330 75
" Water	38 40
" Commission on grain charter, 2½%	514 90
" " J. D. S. & Bros. Co., 1¼%	257 45
" Postage	27 72
" Shipping crew	348 00
" Br. Consul's fees	14 60
" Clearance fees	2 70
" Pilotage, outward	183 00
" Commission on overdraft, $2,080 93 @ 2½%	52 02
	$9,395 77

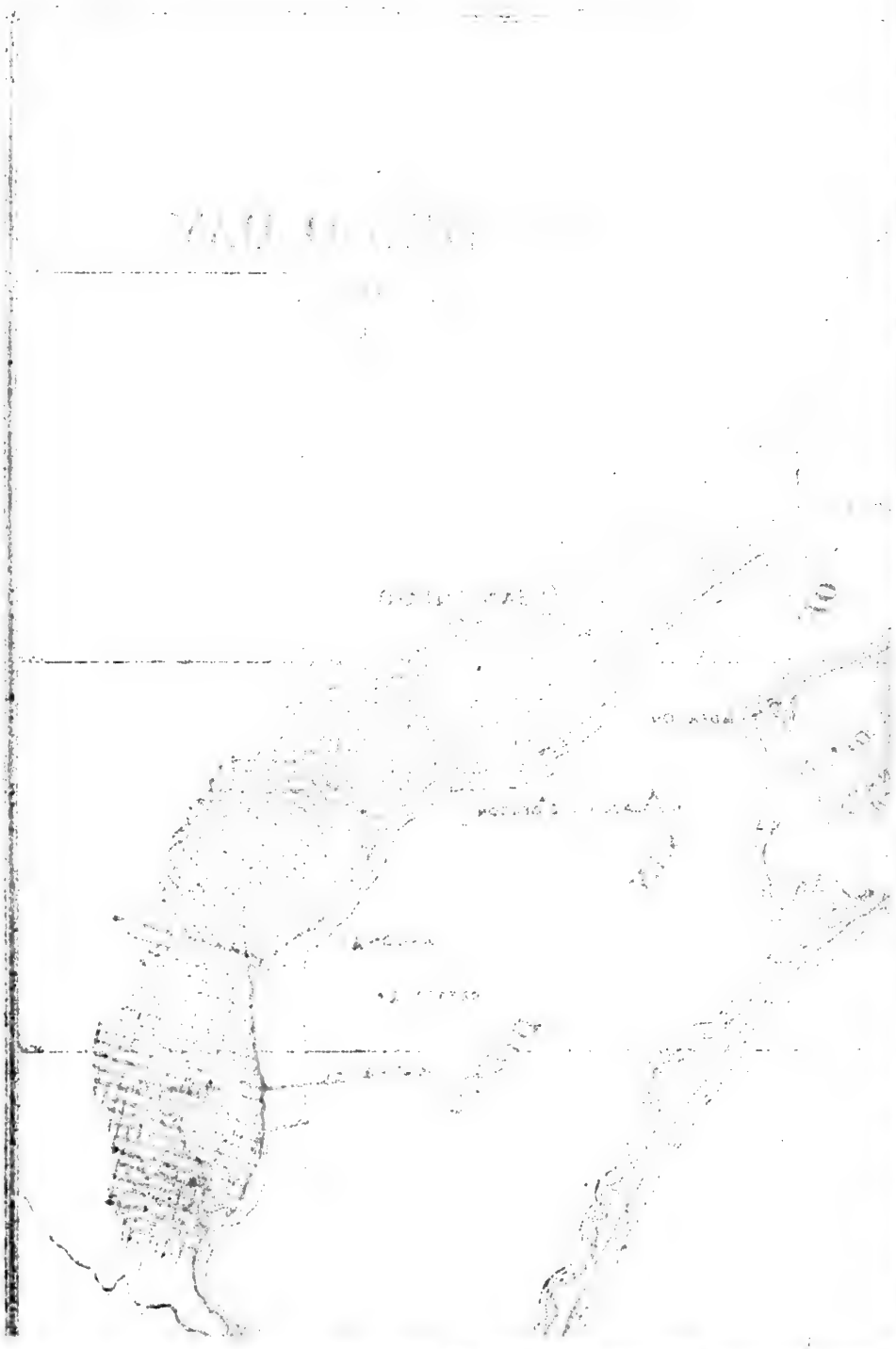
Disbursement account of British Ship 2278 tons register, J D. Spreckels & Bros. Co., agents. Arrived Sept. 21st, 1893, from Liverpool, with 3629 tons general cargo; sailed Nov. 28th, with 3717 tons wheat. Time in port 69 days. Average disbursements about 14 6 per net register ton.

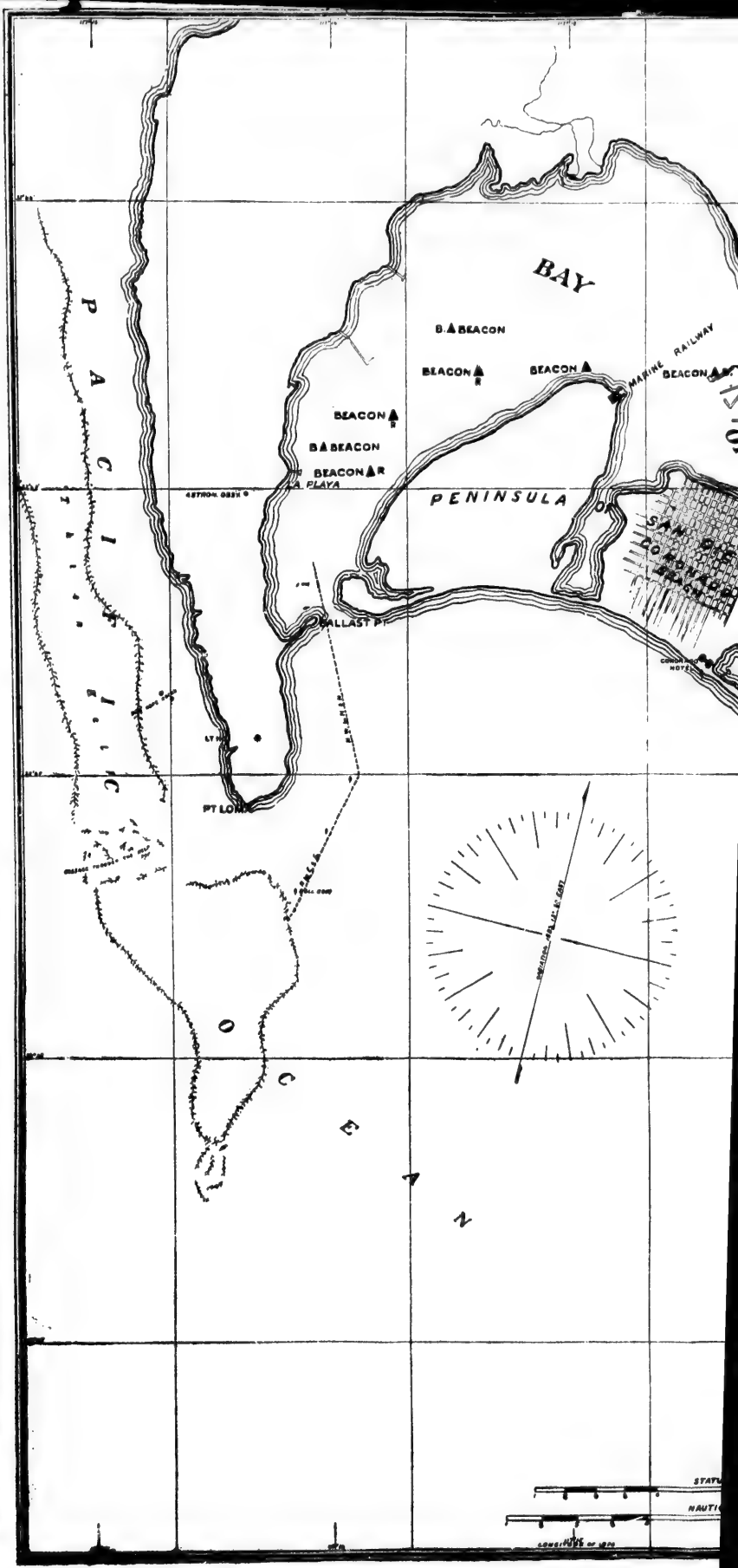
To Cash, Captain	$260 00
" Merchants' Exchange, reporting	5 00
" British Consul's fees	3 15
" The "Guide," reporting	1 00
" Entrance fees	5 70
" Tonnage duty	136 68
" Pilotage, inward	198 62
" Quarantine fees	10 00
" Commercial Publishing Co., advertising	10 00
" Entering	5 00
" J. D. Spreckels & Bros. Co., towage	80 00
" Repacking tin	2 00
" Port Physician	40 00
" Stores	1,124 17
" Cooperage	87 00
" Lining ship	53 55
" Chimney cap	16 00
" Board of Port Wardens' survey	75 00
" Dockage, Section 4, Sea-wall	558 60
" Water	62 70
" Claims—damages	53 30
" J. D. Spreckels & Bros. Co., commission on inward freight, $11,303.54 @ 2½	282 59
" Clerk	167 00
" Stevedores	2,343 96
" Salt—damage claim	50 40
" Drugs	12 00
" Surveyor	35 00
" Clothing	261 10
" New sacks	1 10
" Laundry	8 40
Carried forward	$5,949 02

Brought forward	$5,949 02
To Rating chronometer	7 50
" Lumber	250 27
" J. D. Spreckels & Bros. Co., towage	437 00
" Shipping crew	231 00
" Photographs for crew	133 05
" Commission on grain charter, 2½	705 63
" J. D. Spreckels & Bros. Co., commission, 1¼	352 82
" Cables, etc	33 92
" British Consul's fees	13 60
" Pilotage outward	99 62
" Clearance fees	4 70
" Clearing	5 00
" Watchman	5 00
	$8,228 13



City and Bay of San Diego.




BAY
B. BEACON
BEACON
BEACON
MARINE RAILWAY
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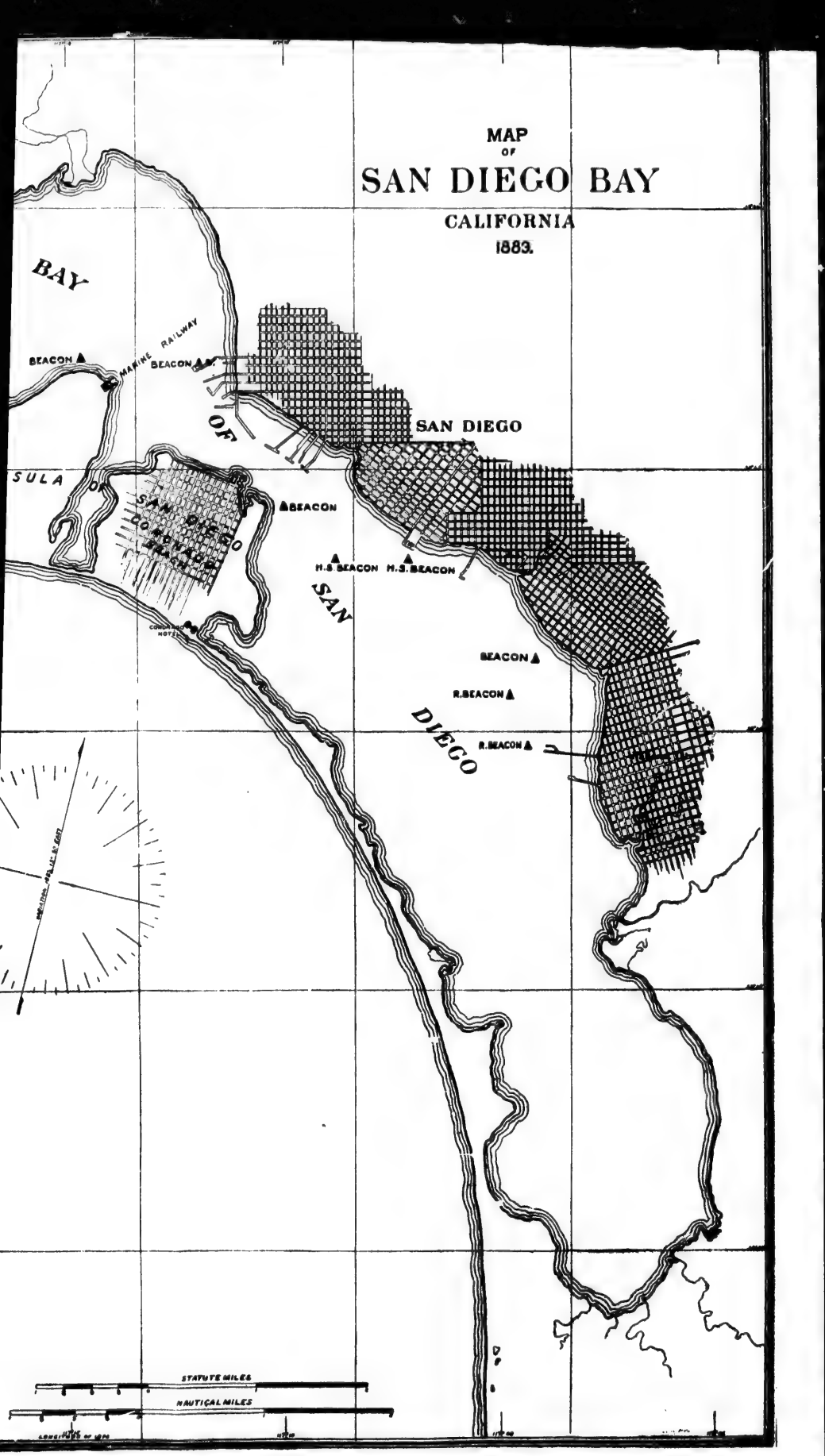
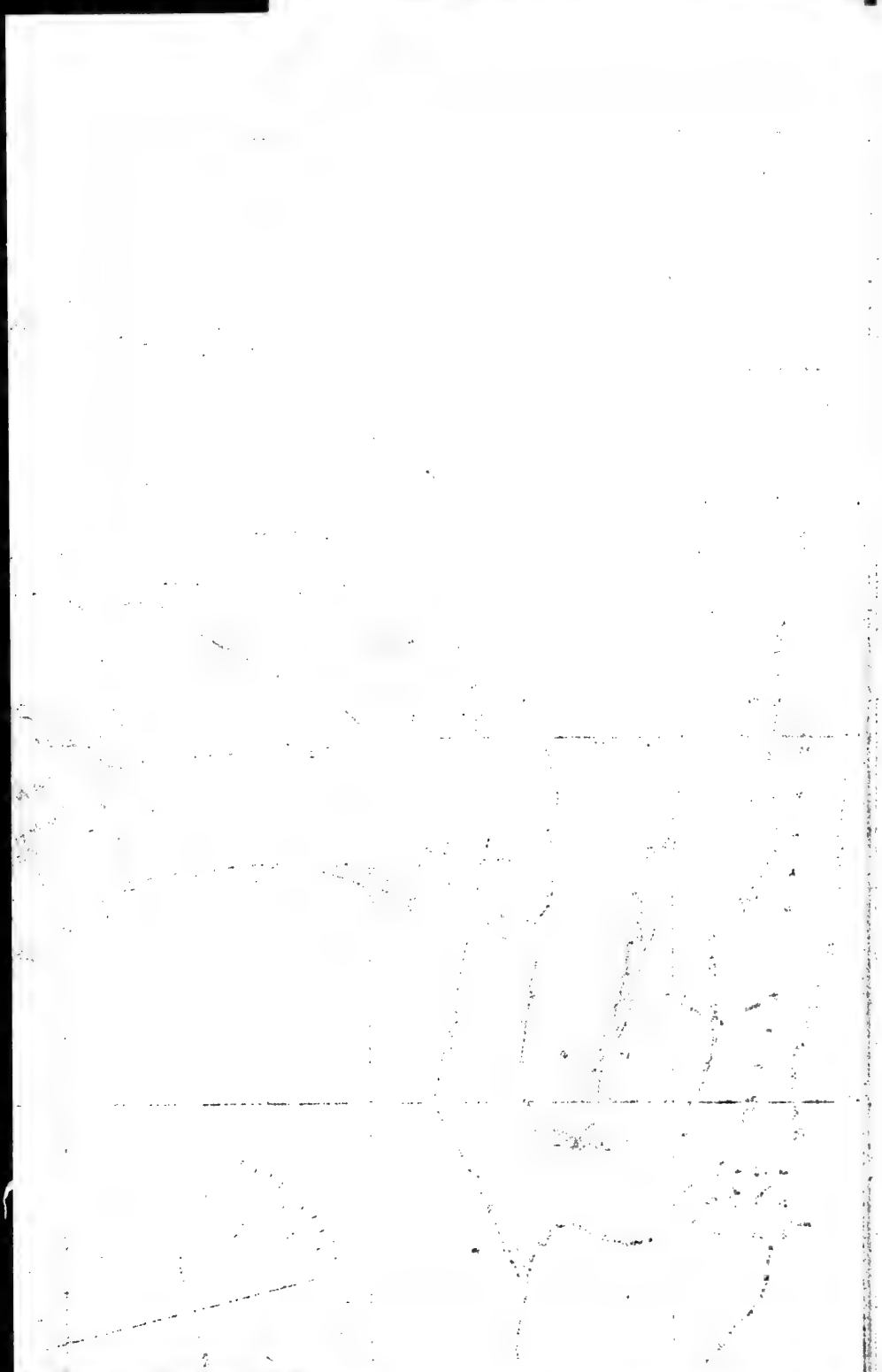
BEACON
PENINSULA
BALLAST PT
PT LOMA
PACIFIC
OCEAN


MAP
OF
SAN DIEGO BAY
CALIFORNIA
1883.
BAY
BEACON
MARINE RAILWAY
BEACON
OF
SAN DIEGO
SULA
SAN DIEGO
CORONADO
BEACH
BEACON
H.S. BEACON
H.S. BEACON
SAN
DIEGO
BEACON
R. BEACON
R. BEACON
STATUTE MILES
NAUTICAL MILES



SAN DIEGO.

LATITUDE 32° 41′ N., longitude 117° 10′ W. Is a city of about 16,000 population, in the county of San Diego, State of California, and is situated on one of the finest harbors in the world. This harbor is the only safe one at all seasons of the year in California south of San Francisco, and has, therefore, a great advantage over the various anchorages south of San Francisco, which are all open roadsteads exposed to stormy winds and heavy seas; it is so completely land-locked and protected from the winds and sea, that even during the heaviest gales vessels can lie alongside the wharves without danger and with ordinary moorings. The depth of water on the bar at the entrance of the harbor is 21½ ft. at mean low tide, and 28½ ft. at spring tides. The average rise and fall of the tides is about 4½ ft., and of spring tides about 9 ft. Vessels drawing 26 ft. have entered the harbor without difficulty. The U. S. Government is at present constructing a jetty at the entrance of the harbor which is designed to increase the draught of water on the bar. The harbor is about ten miles long and from one to two miles wide, with a ship channel from one-half to five-eighths of a mile wide. The wharves all run to deep water, with from 18 to 30 ft. alongside at mean low tide; there is safe anchorage in good holding ground in any part of the channel.

San Diego is the natural port of entry for Southern California and the immense adjacent territories, the resources of which are being rapidly developed. During the season of 1893, 215,95[illegible] centals of barley and 133,706 centals of wheat were exported, and with facilities for a ready market the area under grain cultivation will probably increase very materially, and the prospects for San

Diego being a regular loading port for large vessels are now quite assured. Vessels destined for this port are in position, when seeking charters, to have the choice of San Francisco, Portland, Puget Sound lumber or grain ports, or the West Coast nitrate ports, in case there is no local demand for tonnage.

The main imports from foreign sources are coal, cement, pig-iron and coke; and the facilities for dispatch in discharging are such that it is a frequent occurrence for a vessel of 2475 tons dead weight to enter, discharge, ballast and sail within 15 days. The greater portion of the coal cargoes are discharged into the Spreckels Bros. Commercial Company's Coal Bunkers (15,000 tons capacity), at about the rate of 350 to 600 tons per day (steamers are discharged at the rate of 800 to 1000 tons per day), the remainder of the coal cargoes being discharged into railway cars or on the wharf. Cement cargoes are discharged into railway cars at about the rate of 2000 casks per day. During 1893, 22 ships with average carrying capacity of 2689 tons, the average stay in port was 24 days; and five ships inward with cargo and outward with grain, average dead weight capacity 2453 tons, had an average stay in port of 44 days.

Custom-house regulations same as at San Francisco.

PILOTAGE.

Pilotage rates are as follows: All vessels under 500 tons register, $5 per foot draught, and all vessels over 500 tons register, $5 per foot draught and 4c. per register ton.

When a vessel is spoken inward or outward bound and the services of a pilot are declined, one-half of the above rates must be paid. There is always a boat cruising outside the bar, and as the pilots are regulated in their services by a Board of Pilot Commissioners, it makes no difference which pilot is employed.

TOWAGE.

There is only one company doing towage at San Diego, and their tariff is as follows:

Net Register Tons.....	400 and under 600	600 and under 800	800 and under 1000	1000 and under 1250	1250 and under 1500	1500 and under 1750	1750 and under 2000	2000 and under 2250	2250 and under 2500
To or from Sea.....	$50 00	$65 00	$75 00	$90 00	$100 00	$110 00	$120 00	$130 00	$140 00
Docking and Undocking..	$15 00	$17 50	$20 00	$22 50	$25 00	$27 50	$30 00	$32 50	$35 00

Charges for other services in proportion or as agreed upon.

DOCKAGE.

The rates for dockage of all vessels, steam or sail, of 200 net register tons, or under, is one cent per ton; for all such vessels of over 200 net register tons, one cent per ton for the first 200 tons, and three-eighths of a cent for each additional ton. Each rate is for a day of twenty-four hours, or any part thereof, no charge being made for Sundays or holidays, provided no work is done.

SPRECKELS BROS. COMMERCIAL CO.'S COAL BUNKERS AT SAN DIEGO. Capacity, 15,000 Tons.

DISCHARGING CARGO.

According to the custom of the port, five days are days are allowed consignees of vessels in which to secure berths before lay-days begin. The customary rate for discharge is 100 tons of coal per day, and other cargo in proportion; but, as before stated, a rate of delivery much in excess of that amount is usually to be expected. Rainy days, legal holidays and Sundays do not count as lay-days.

WEIGHING.

Cargoes of coal which are discharged into bunkers, are taken into tram cars which are passed over scales placed near the discharging cranes. Cargoes which are discharged into railway cars pass over track scales, and the weight of each carload is taken. For the use of the scales a charge of 12½ cents per ton is made, of which amount the ship pays one-half. Freights are payable on the Custom-house returns of weight, provided entire quantity is weighed, in the case of coal, pig iron, coke and merchandise of that character.

STEVEDORE RATES.

General Merchandise, weight or measurement, per ton of 2240 lbs., or 40 cubic feet ...	$0 50	net
Railroad, Iron and Bricks	75	"
Coke	75	"
Coal, Pig-iron, Ballast and Barley	50	"
Cement and Wheat	45	"

BALLAST.

Is brought alongside in barges, and is hoisted aboard by steam-power. There is only one company with facilities for bringing ballast alongside without shifting the ship, and able to supply it in large quantities with dispatch. The cost is $1.00 per ton of 2000 lbs., dumped down the hatch.

WATER.

Is supplied from the docks at one-half cent per U. S. Standard gallon of 231 cubic inches. When water is pumped aboard by a water-boat while the vessel is in the stream, the water is one cent per gallon. The quality of the water is excellent.

SUPPLIES.

Of all kinds can be purchased here at reasonable rates, and anything that the local market cannot supply can be brought from San Francisco at a low rate of freight and with very little delay.

REPAIRS.

The facilities for repairs above water are good. There are three machine companies prepared to do iron work, and several firms of ship carpenters. There is a marine railway with a capacity of 1000 tons.

Pro forma disbursement account of a ship of 1850 tons, inward with cargo of coals, outward with ballast; in port 21 days:

Customs fees in and out	$7 90
Tonnage tax, 1850 tons at 6c	111 00
British Vice-Consul's fees in and out	5 00
Advertising crew	3 00
One-half weighing fees, 3200 tons coal, at 6¼c	200 00
Inward pilotage, 21 ft., $5 - $105; 1850 tons, 4c. $74	179 00
Outward pilotage, 21 ft., $5 - $55; 1850 tons, 4c. $74	129 00
900 tons ballast at $1 per 2000 lbs.	900 00
Towage from and to sea, docking and undocking	270 00
Dockage, 10 days at $8.18	81 80
Water, 5000 gallons at ½c	25 00
Rent of donkey falls and gear	16 00
Discharging 3200 tons coal at 50c.	1600 00
Cables and postage	7 50
Cash to Captain	200 00
Provisions	65 00
Meats and vegetables	100 00
Clothing for seamen	158 00
Port Agency	100 00
Address commission, 2½ %	288 00
	$4,446 20
Inward Freight, 3200 tons at 15s, £2400 at $4.80	$11,520 00

Disbursement account of a vessel of 2363 tons register, arrived Dec. 4th, 1893, with 3604 tons of coal; sailed Jan. 17th, 1894, with 3614 tons grain; total days in port, 44:

British bark ——*2363 tons register, in account with Spreckels Bros. Commercial Company.*

To Customs fees, in and out	$10 60
" Tonnage duty, 2363 tons at 6c	141 78
" British Vice-Consul's fees in and out	9 90
Brought forward	$162 28

Carried forward		$162 28
To Pilotage, in and out		414 00
" Towages from and to sea and in port		345 00
" One-half weighing fees, $3604\frac{65}{100}$ tons coal at $6\frac{1}{4}$c		225 29
" Discharging $3604\frac{65}{100}$ tons coal at 50c		1,802 32
" Loading 3614 tons grain at 45c		1,626 30
" Dockage, 27 days at $10.12 per diem		273 24
" Lining ship, 30,686 ft. lumber at $15 50	$465 63	
" " " labor and nails	74 37	— 540 00
" Surveyor's fees		45 00
" Stores, bread at 4c	$192 25	
" " provisions and chandlery	604 78	
" " meats	318 60	
" " vegetables	47 14	
" " fish	7 30	
" " water	38 63	—1,208 70
" Sundries, advertising crew	3 00	
" " rent of donkey falls	18 00	
" " repairs	113 56	
" " paints	76 95	
" " sawdust	3 00	
" " drugs	3 00	
" " port physician	27 00	
" " boat hire	6 00	
" " rating chronometer	2 50	
" " cables and postages	10 86	— 263 87
" Address commission, $11,679.05 at $2\frac{1}{2}$		291 97
" Commission on outward freight, $3614\frac{340}{2240}$ tons at 27s 6d, £4969 9s 2d at $4.86 = $24,151.57 at 5		1,207 57
" Cash to Captain		589 54
" Port Agency		100 00
		$9,095 08

CREDIT.

By Inward freight on cargo of coals from Newcastle, N. S. W., to San Diego, Cal., say: $3604\frac{1450}{2240}$ tons at 13s 6d, £2433 2s 8½d at $4.80	$11,679 05

E. & O. E.

San Diego, Cal., January 16, 1894.

MISCELLANEOUS.

The gain in time through vessels loading homewards at San Diego, instead of proceeding to Portland or Tacoma, is represented by the following averages of time used on the Coast:

					Average.
6 vessels discharged and loaded at San Diego in	...	...	42 days
6 " " at San Diego and loaded at Portland in	113 "
3 " " " " " Tacoma "	103 "

Grain vessels sailing from Tacoma or Portland have to cover not less than 1500 miles greater distance than from San Diego.

BUNKER COALS. — Best quality, Cardiff, English, Australian and Nanaimo always on hand; can be furnished rapidly in any quantity at prices ranging at present from $7.50 to $9.00 per ton of 2240 lbs.

PORTLAND.

THE principal port of entry of Oregon, situated on Willamette River, about 12 miles from its junction with the Columbia River. The distance from the crest of the Columbia River Bar to Astoria is 14 miles, and from Astoria to Portland 105 miles by ship channel. The River and approach to same is quite free from fogs. Prevailing winds are southerly. Mean temperature about 53°—ranges from about 94° to 20°. Principal exports are: Grain, flour, salmon. About 120,000 tons registered tonnage per annum has been utilized during past two years for grain and flour exportation.

The port has been handicapped to a great extent by the cost of lighterage, which is now quite entirely a thing of the past; and the expenses in other directions have also been reduced. It offers a distinct advantage that vessels are continually in fresh water, and thus undergo a cleaning process.

Entrance to the Columbia River and Depth of Water from Astoria to Portland.

The jetty constructed at the mouth of the Columbia River, by the U. S. Government, has developed a straight channel over the bar of 31 feet depth for half a mile in width, and 28 feet depth for one mile in width, at mean low water, with a tidal rise of seven feet. Vessels frequently come in under sail.

From Astoria to Portland the least water at zero is 22 feet, 6 inches, with a tidal rise of seven feet at Astoria and two and a half feet at Portland, and this depth is constantly increasing. This change has been brought about

in the rivers throug[illegible]he well-directed efforts of a municipal corporation, c[illegible]ed by the State Legislature, known as the "Port of P[illegible]land," which has expended during the past two years $414,000, and has authority under the law to expend $200,000 more, or as much thereof as may be necessary to secure and maintain a channel of twenty-five feet at zero, from Portland to Astoria. With the amount already expended, upwards of eight miles of dikes have been constructed on the several shoals in the river, and dredging has been done to the extent of 255,415 cubic yards.

In addition to this, the United States Government has a powerful pump dredge employed, capable of removing 60,000 cubic yards per month. These combined efforts will continue until a 25 foot channel at zero is secured. The results are most gratifying, as shown by the fact that during the present season vessels have loaded to their draft at Portland, and lighterage is practically eliminated from the expenses of this port.

BAR PILOTAGE.

For piloting an inward or outward bound vessel to or from Astoria over the bar, or from within the bar to the open sea, all vessels shall pay five dollars per foot draft, and two cents per ton for each and every ton registered measurement from or within the bar.

The pilot who first speaks a vessel, or duly offers his services thereto as pilot, on or without the bar pilot grounds, is entitled to pilot such a vessel over the same; but the master may decline to accept, and may navigate his vessel over said pilot grounds without a pilot; but, nevertheless, he shall, if inward bound, pay to such pilot

the full amount of pilotage to which such pilot would have been entitled if his offer had been accepted and his services performed accordingly; and, if outward bound, one-half such amount.

RIVER PILOTAGE.

For piloting a vessel upon the river pilot ground between Astoria and Portland, whether ascending or descending, all vessels shall pay two dollars per foot draught and two cents per ton for each and every ton registered measurement; and the Board is authorized to prescribe a proportionate compensation for pilot service between other points on said ground; and for moving a vessel in port from one dock to another, or from one part of a dock to another part of the same dock, the charge thereof shall be a sum not exceeding $7.50; and the pilot shall, on being thereunto requested by the master of a ship, be required to do such work, and for such compensation If a river pilot shall speak a vessel, and offer his services to pilot the same upon the river ground, and his services be rejected by the master, the pilot first speaking said vessel shall be entitled to half pilotage, to be recovered of said master or vessel.

Every pilot is entitled to, and shall receive from the vessel to which his services are rendered, the full amount of pilotage fees.

Custom House and Chamber of Commerce.

Rates of commission and brokerage same as at San Francisco.

TOWAGE.

This is in the hand of the Union Pacific Railroad Company, and the following rates took effect September 1st, 1893:

From Pacific Ocean or Astoria to Portland and return—

Vessels 500 to 700 tons register, ...	$500
Over 700 to 1000 tons register, ...	550
Over 1000 to 1200 tons register, ...	600
Over 1200 to 1500 tons register, ...	650
Over 1500 to 1800 tons register, ...	700
Over 1800 to 2000 tons register, ...	750
Over 2000 to 2500 tons register, ...	800
Tug's hawser, when used, ...	$15 each way.

Vessels towed from sea to Astoria and return only will be charged 70 per cent. of rate charged to Portland and return.

Vessels paying the above rates will be moved within the harbor limits of Astoria or Portland at a charge of $20 for each steamer used for each move.

No additional charge will be made for taking vessels through drawbridges at Portland, provided this Company is released from liability for damages that may be sustained by vessels while passing through such bridges.

The Company does not assume any responsibility for the acts or omissions of any bar or river pilots; and any unnecessary detention of tow-boats caused by any fault of the ship or pilot thereof will be charged for at the rate of $8 per hour in addition to the above rates.

All charges due this Company must be paid before tug is furnished to move the vessel from Astoria to the sea, and any claim against the Company must be presented before the vessel leaves Astoria.

MISCELLANEOUS.

Stevedoring Rates, Discharging. — Ballast, cement, 35c. per ton; coal, 37½c. per ton; general merchandise, pig-iron, 40c. per ton; glass, 45c. per ton; brick and fancy tiling, patent fuel, 50c. per ton; railroad iron, 55c. per ton; coke, 60c. per ton.

Loading. — Wheat or flour, 35c. per ton; barley, 37½c. per ton; salmon, 45c. per ton.

Ballast.—In addition to the charge above named for discharging there is a charge of 30c. per ton for hauling ballast off dock, which includes wharfage.

Dunnage and Lining.—Fir lumber for lining or dunnage, from $9 to $10 per 1000 ft.; spruce, from $12 to $15 per 1000 ft. A lump sum is generally paid for lining a ship — a ship for wheat, say 1500 tons, $300; for flour, $345. This includes labor, lumber, nails, etc.

Dockage and Fresh Water Charges.—None.

SHIPPING SEAMEN.

The laws are very strict in regard to seamen, and heavy penalties are imposed for persuading, or attempting to persuade, seamen to desert or leave vessel without permission; for harboring or secreting or aiding such; for demanding remuneration from seamen for obtaining employment for them, or for exacting from the master or agent of vessel more than $10 per man for each seaman supplied.

Neither may an officer or seaman on a sea-going vessel be arrested or imprisoned for debt.

Copy of disbursement account of a 2000-ton register vessel, which arrived at Astoria May 13th, 1893, with a general cargo from Liverpool, where, after discharging part cargo, she proceeded to Portland, May 22d, to discharge balance, where she loaded a full cargo of wheat for U. K.; sailed from Portland June 23d, 1893, and from Astoria a few days later; time, 48 days.

Inward Freight, 2855 tons at 13s 6d, £1927 2s 6d at $4.80		$9,250 20
Disbursements, Astoria in:		
U. S. Customs fees entering and clearing up		$7 70
" Tonnage dues		122 40
Consul's fees		6 25
Docking		7 50
Cash to Captain		10 00
Surveying hatches		15 00
Attendance		25 00
Cables		2 74
Portland:		
U. S. fees entering and clearing		4 70
" inspector up river		12 00
" " overtime (not usual)		32 50
Towage from sea to Portland and return		1,264 00
" three moves in port at $17.50		52 50
Pilotage: Bar inwards	$145 36	
" Up river	80 36	
" Three moves in port at $7.50	22 50	
" Down river	85 36	
" Bar outward	152 86	
		486 44
Crew notice in paper		1 60
Stevedores discharging general cargo		1,187 29
" loading wheat		1,043 82
Port Warden		30 00
Ship Clerk		69 00
Lining ship, including lumber		400 50
Coopering tin-plate boxes, etc		24 00
Brought forward		$4,804 94

Carried forward	$4,804 94
Marine Surveyor	30 00
Ship chandlery, stores, etc	190 68
Rating chronometers	8 00
Vegetables	18 00
Consul's fees	6 40
Cables, etc	39 00
Laundry	21 25
Butcher	71 92
Shipping full crew with advances	759 00
2½% commission on inward freight	231 25
Port Agency fee	75 00
Commission on homeward charter, 3125 tons at 25s at $4.86 = $18,984.38 at 3¾%	711 90
Astoria outwards:	
Cables, etc	4 65
Lumber	7 50
Stores (sea), etc	152 10
Consul's fees	17 35
Watchman	10 00
Exchange on draft on Portland	94
Cash to Captain in port	265 00
Balance remitted	1,825 32
	$9,250 20

E. & O. E.
Portland, Or.

Total Disbursements, $7,424.88 = 14s 10d per register ton.

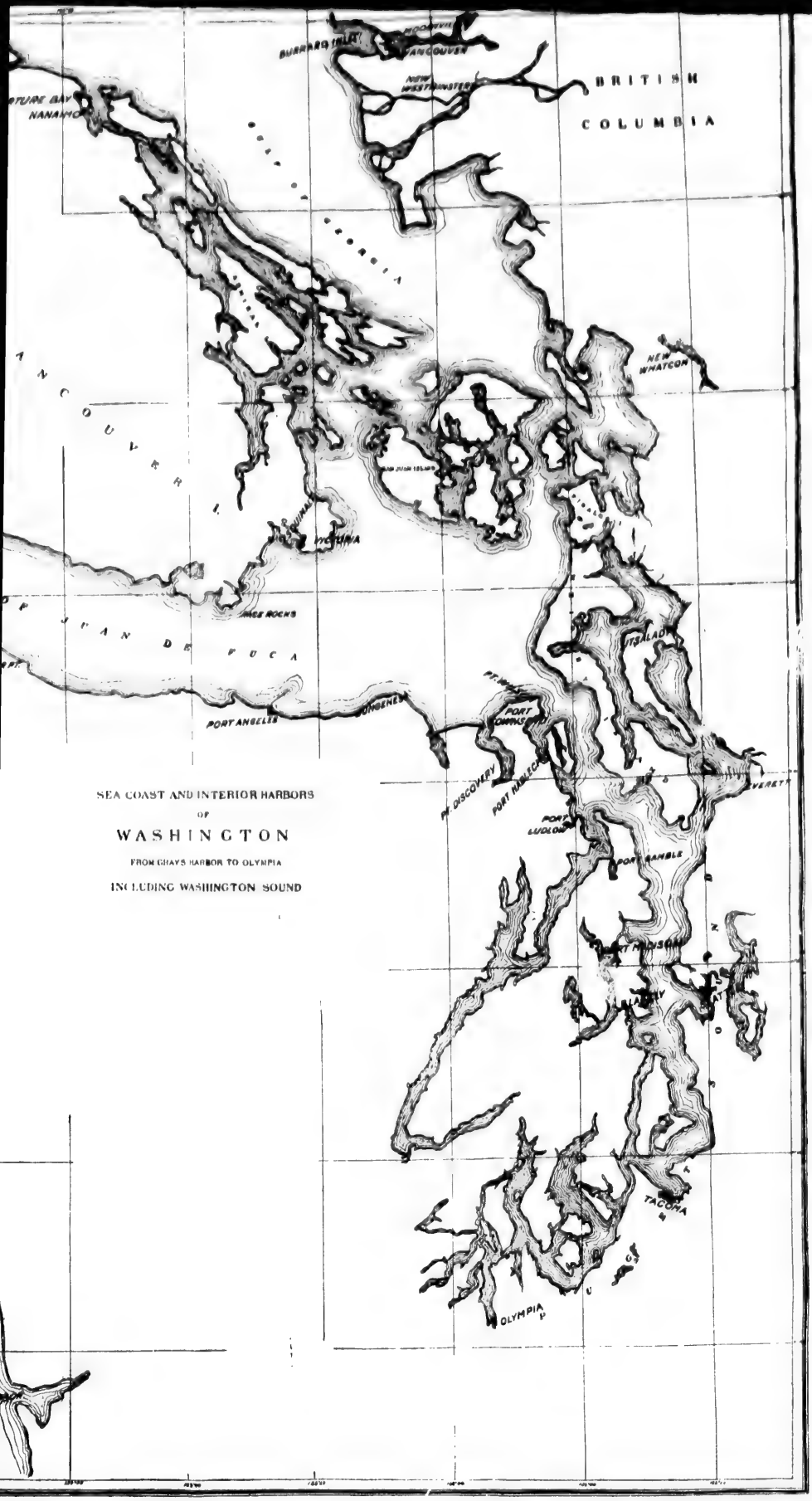
Disbursements account of the British Ship——— 1702 tons register, arrived with ballast at Portland, Oregon, January, 1894:

Entering and clearing	$4 70
Astoria account, including U. S. tonnage dues, consular fees, customs, etc	167 44
Towage, sea to sea, with use of hawser	730 00
Moving in port and clearing drift	35 00
Bar pilotage	245 52
Brought forward	$1,182 66

Carried forward	$1,182 66
River pilotage	139 04
" " moving ship	" 50
Stevedores' account	1,233 00
Chandlers' account	600 47
Liners' account	210 00
Surveyor	30 00
Butcher's account	121 95
Advertising	1 60
Rating chronometers	8 00
Tailors' account	164 85
Shipping Master for men	300 00
Consular fees	13 40
Flour	13 75
Telegrams, etc	10 00
Charter commissions and agency	935 45
Commission and insurance	239 27
Cash paid Captain	510 15
Total	$5,721 09

$5721.09 - 138 6d per register ton.

DEPARTURE BAY
NANAIMO
CAPE FLATTERY
PILLAR PT.
FLATTERY ROCKS
GRAYS HARBOR
SEA COAST AND INTE
OF
WASHIN
FROM GRAYS HARBOR
INCLUDING WASHING



SEA COAST AND INTERIOR HARBORS

OF

WASHINGTON

FROM GRAYS HARBOR TO OLYMPIA

INCLUDING WASHINGTON SOUND

PUGET SOUND.

CAPE FLATTERY, entrance to Juan de Fuca Straits, is 680 miles north of San Francisco. Prevailing winds are westerly from May to October, and easterly remainder of year. With westerly winds, vessels of the largest tonnage can sail to Port Townsend, but should wind be unfavorable the services of powerful tugs can be secured off Cape Flattery, their customary seeking station, by signalling the telegraph operator at Cape Flattery. The Straits vary from 11 to 20 miles in width, free from shoals or dangerous reefs, and it is unnecessary and non-compulsory to take a pilot; they are also carefully guarded by first-class lights and fog signals, and with careful chart reckonings no danger need be apprehended.

Port Angeles, 63 miles from Cape Flattery, is a perfect harbor of refuge, and is rapidly growing in favor as a port of call for vessels coming for orders. Masters of vessels prefer going there rather than to Royal Roads, it being easy of access, with superior anchorage. Ships anchor within half a mile of telegraph station, and no time need be lost through rough weather in getting ashore. Ships going to coal or lumber ports of British Columbia find it cheaper to proceed there when requiring services of tug, being in a position to employ either Puget Sound or British Columbia towboats, as may be most convenient. Port Angeles is a sub-customs port of entry, vessels being privileged to remain twenty-four hours in which to report, and forty-eight hours to enter at the Custom House.

Port Discovery, entered from Straits 8 miles east of Port Townsend. Here are mills of Discovery Mill Co.

(Moore & Smith Lumber Co., San Francisco, agents). Vessels ordered direct to these mills can proceed there without calling at Port Townsend, customs officers going over to make usual examination of foreign vessels. Ballast grounds are at southwest end of Port Discovery Bay.

Port Townsend is 93 miles east of Cape Flattery. The Bay affords unlimited anchorage in from 8 to 10 fathoms; perfectly safe in severest weather. Extensive ballast grounds outside of imaginary line from Point Hudson to Point Vingor, in 20 to 25 fathoms. (N. B.—All ballast discharged in waters of Puget Sound must be in over 20 fathoms.) This is customs port of entry and clearance for all ports on Puget Sound, where all vessels have to stop to enter and clear. It is also headquarters for principal shipping houses, tug companies and stevedores doing business at Puget Sound ports. Ships seeking charters or waiting orders come to Port Townsend; the time occupied in waiting can be utilized for discharging ballast. Mail matter or telegrams for vessels bound to or loading at Puget Sound ports can be addressed "care of Messrs. Rothschilds & Co., Port Townsend," which will ensure prompt delivery, free of charge, as they have communication with every vessel which enters or clears. This port is also the headquarters of all the consuls and consular agents of foreign countries residing in the State of Washington.

Port Hadlock is at head of Port Townsend Bay. Here are Washington Co.'s mills (W. J. Adams, agent, San Francisco). Ballast has to be discharged at Port Townsend, where vessels must also transact their customs and quarantine business. Anchorage is safe, and wharves are capable of accommodating the largest vessels.

Port Ludlow, 18 miles south of Port Townsend. Puget Mill Co. (Messrs. Pope & Talbot, agents, San Francisco). Ballast grounds within half a mile of mill wharf.

Port Gamble, 24 miles south of Port Townsend (Puget Mill Co.). Ballast grounds close to mill wharf.

Utsalady, on Puget Sound, 50 miles from Port Townsend. Also Puget Mill Co. mills. Ballast grounds close to mill wharf.

Port Madison, 32 miles south of Port Townsend, has good harbor and safe and convenient anchorage. Lumber shipped here is mainly for the coastwise trade.

Port Blakeley, 33 miles south of Port Townsend. Here are mills of Port Blakeley Mill Co. (Messrs. Renton, Holmes & Co., agents, San Francisco). Ballast grounds off entrance to Blakeley harbor. There is a large and commodious ship-yard in operation here, where a number of vessels are built annually for the coasting trade.

Seattle, on Elliott Bay, 35 miles from Port Townsend, is a rapidly growing city of 60,000 population. Wheat, coal and lumber port. Ballast received at city wharves free of expense. It is a sub-customs port of entry. Good harbor and splendid anchorage.

Everett, a new city 30 miles southeast of Port Townsend. Sub-customs port of entry. Is principally a manufacturing town. A ship-yard is located here for building steel vessels.

New Whatcom, 40 miles northeast of Port Townsend, is a lumber and coal shipping point. Also sub-customs port of entry.

Tacoma.—Particulars elsewhere.

TOWAGE RATES

.. OF THE ..

PUGET SOUND TUG-BOAT COMPANY,

PORT TOWNSEND, WASHINGTON.

VESSELS FROM	FROM SEA TO					FROM PORT TOWNSEND TO					FROM PORT ANGELES TO				
	Discovery, Townsend, Hadlock.	Gamble, Ludlow.	Madison, Seattle, Blakeley, Bellingham Bay.	Tacoma, Utsalady.	Nanaimo, Burrard Inlet.	Discovery, Hadlock.	Gamble, Ludlow.	Seattle, Madison, Blakeley, Bellingham Bay.	Tacoma, Utsalady.	Nanaimo, Burrard Inlet.	Discovery, Townsend, Hadlock.	Gamble, Ludlow.	Seattle, Madison, Blakeley, Bellingham Bay.	Tacoma, Utsalady.	Nanaimo, Burrard Inlet.
500 to 700 tons.....	$150	$200	$225	$250	$275	$30-20	$45	$75	$100	$225	$50	$100	$125	$150	$225
700 to 1000 tons.....	175	225	250	275	300	40-25	60	100	125	250	75	125	150	175	250
1000 to 1200 tons.....	200	250	275	300	325	50-40	70	110	140	275	100	150	175	200	275
1200 to 1500 tons.....	225	275	300	325	350	60-50	75	125	150	300	125	175	200	225	300
1500 to 1800 tons.....	250	300	325	350	375	75-60	100	150	175	325	150	200	225	250	350
1800 to 2000 tons.....	275	325	350	375	400	100-75	125	175	200	350	175	225	250	275	375
2000 to 2500 tons.....	300	350	375	400	425	125-100	150	200	225	400	200	250	275	300	400

Vessels under 500 tons subject to special rates. Docking vessels, $25. Hawser to or from sea, $10.

Captains to wire agent of tugs 48 hours' notice of when tug is required.

Rate to Royal Roads $25 more than Port Angeles rates.

PILOTAGE.

Non-compulsory, and when employed by ship sailing in, rate subject to agreement. Tugs have full charge of vessels in tow, tug-boat masters all being government licensed pilots.

STEVEDORING.

LUMBER.— Ships and cargoes vary so much that exact figures cannot be given with accuracy. Vessels with large ports, loading Australian, West Coast or East Coast of South America cargoes, $1.15@$1.35 per 1000 feet board measure; same vessels, China or United Kingdom cargoes, $1.40@$1.75. Iron vessels (cargo through hatchway), $1.35@$1.50 per 1000 feet. Vessels with steam winches, 10 to 15 cents per 1000 feet less. Spars, special contract. Crews can be employed with stevedores in loading lumber, and ship is credited for such labor at rate of 20c. per hour, thus reducing cost of loading ten to thirty per cent.

WHEAT.—Competition for stevedoring wheat cargoes is very strong. Rates are from 30c. to 35c. per ton.

COAL.—18c. per ton for double-decked ships; 20c. per ton for three decks.

GENERAL CARGOES.—General merchandise, 45c. per ton. Rails, 55c. per ton.

BALLAST.—Usually discharged by crews. Rate for stevedores, 30@35c. per ton.

GENERAL.

Ships of the deepest draft can load alongside any of mill, wheat or coal wharves, and when loaded proceed to sea without waiting for tide.

For guidance of owners who may charter iron ships for lumber, would mention that it is usual to insert clause, "Such lumber and/or timber as may be taken down vessel's hatchways;" for wooden ships, "Such lumber and/or timber as may be taken through vessel's present ports (if any) and hatchways."

Broken stowage is supplied in lengths 10 to 15 feet, and/or laths or pickets.

Ships generally retain as much ballast with lumber cargo as would be required to enable them to stand up when empty; this allows them to carry a deck load, which is customary in this trade.

Wooden vessels carry lumber from 70 to 77½ per cent. and iron ships from 72½ to 85 per cent. of register tonnage in 1000 feet, board measure.

LUMBER VESSEL'S EXPENSE ACCOUNTS.

Pro forma Disbursement List of ship of 1500 tons register, in with ballast, out with lumber, Puget Sound or Burrard Inlet:

	Puget Sound.	Burrard Inlet.
To Customs fees in and out	$6 80	$5 00
" British Consul, say	15 00	.....
" Tonnage dues	.....	45 00
" Health Officer fees	.....	5 00
Brought forward	$21 80	$55 00

	Puget Sound.	Burrard Inlet.
Carried forward	$21 80	$55 00
To Discharging part ballast, say 300 tons	120 00	120 00
" Docking ship from ballast ground	20 00	20 00
" Stowing and shipping, say 1,200,000 feet	1,560 00	1,620 00
" Surveyor's fees	20 00	20 00
" Towage, say	400 00	700 00
" Water (half a cent per gallon), say	20 00	20 00
" Stores, say	300 00	375 00
" Sundries, say	100 00	125 00
" Sailors' advances (wages $25 to $30), say,	300 00	300 00
" Pilotage in, 14 feet at $3	.....	50 00
" " out, 21 " " $3	.....	63 00
" Commission on charter, 5 %, payable port loading	753 85	753 85
" Agency fees, boat hire, telegrams, etc	50 00	50 00
	$3,665 65	$4,271 85

British Ship —— , 2175 tons register, from San Francisco with 1100 tons ballast (700 tons discharged), outward cargo 1,848,315 feet lumber; loaded at Port Hadlock:

DEBIT.

To British Consul fees: In, $1.25; out, $25.65			$26 90
" Customs fees: In, $2.40; out, $4.40			6 80
" Sundries: Ballast permit	$1 00		
" " Advertising crew	3 00		
" " Surveyor's fees	20 00		
" " Repairs donkey engine	20 85		
		44 85	
" Supplies: Ship chandlery	11 80		
" " Butchers'	64 12		
" " Groceries and chandlery	85 84		
		161 76	
" " Washington Mill Co	221 54		
" Commission on charter, do	1,100 99		
		1,322 53	
Brought forward			$1,562 84

Carried forward			$1,562 84
To Stevedoring account: Discharging ballast, mooring and unmooring ship, and stowing cargo			2,677 99
" Towage			375 00
" Cash to Captain			90 00
" Sundries: Wages Steward		$22 66	
" " Labor (painting)		4 00	
" " Watchman and boat hire		12 50	
			39 16
" " Passages and freight charges			8 75
" Advances to crew		$575 00	
" Bonus to Shipping Master and fees		205 00	
			780 00
" Agency fees, launch hire and cables			50 04
" Interest and commission on draft on owners			54 34
			$5,638 12

TACOMA.

TACOMA, on Commencement Bay, is situated at the head of navigation on Puget Sound, 170 miles from Cape Flattery. It is a city of 50,000 inhabitants, and the most important shipping port on the Sound. Terminus of the Northern Pacific Railroad and of the Northern Pacific Steamship Company, with steamers direct for China or Japan. The exports from this place for the year ending 1893 amounted to $5,000,000, and included 4,000,000 bushels of wheat, 68,000,000 feet of lumber, 117,000 barrels flour and 300,000 tons coal. Tea is received direct from China, and extensive lumber mills, such as the Tacoma Mill Co. (Messrs. Hansen & Co., agents, San Francisco), and the St. Paul & Tacoma Lumber Co. manufacture for foreign and Eastern trade. Ships are met at Cape Flattery with sea-going tugs. Good anchoring in 15 fathoms water at safe distance from north shore of bay, with good holding ground. Three grain warehouses and elevators, total capacity, 2,500,000 bushels with good wharves and buoys convenient to wharf. Depth alongside of wharves 30 feet at lowest low water. Grain can be loaded at the rate of 100 tons per hour, and the quickest dispatch given. There is also a new floating dry-dock here, 325 feet long, 100 foot beam, easy of access, and capable of lifting any sailing ship afloat. Three coal bunkers, the largest of which has pockets holding in all 5000 tons, and steamers of 4000 tons capacity have been loaded in 12 hours at these bunkers.

HARBOR REGULATIONS.

Vessels must not be moored or anchored in the harbor of Commencement Bay in such a manner as to interfere with vessels approaching or leaving the wharves.

A vessel will not be entitled to a berth at any public wharf or dock until an application shall have been made to the harbor master. Berths will be assigned in the order of the application. No one except the harbor master has authority to assign berth to vessels.

To make room for vessels requiring immediate accommodation, idle vessels must haul or go to anchor, at expense of such vessel, when required to do so by the harbor master.

When it is necessary for a vessel to move, to allow exit or entrance of other vessels, she must do so at her own expense.

When ballast, stone, coal, brick, ashes, cinders, dust, rubbish or other loose matter, or anything that will sink, is being landed from a vessel upon a wharf or landing, or is being transferred from one vessel to another, a canvas chute or other contrivance to the satisfaction of the harbor master must be used to prevent any part of such substance from falling into the dock.

Fire must not be used on board of any vessel for heating pitch, tar or other inflammable substance.

No substance that will sink or form an obstruction to navigation must be deposited in the waters or on the shores of the harbor without first obtaining permission in writing from the harbor master, and no permission will be granted to discharge ballast in the bay where there are less than twenty-two fathoms of water at low tide.

All vessels at anchor shall be required to toll a bell during the continuance of foggy weather, and shall keep an anchor light burning from sunset to sunrise, at some point of said vessel where best seen, at least twelve feet from the deck.

Vessels may moor at the city buoys upon payment of the sum of ten dollars ($10) for the period of fifteen days, or any part thereof, which shall be paid to the harbor master, who shall receipt for and pay over the same to the city treasurer. Vessels mooring at the city buoys do so at their own risk in all respects. Only one vessel shall be allowed to moor at each buoy. The harbor master shall have power at any time to remove any vessel from said buoys at the risk and expense of said vessel.

HARBOR MASTER.

In addition to his ordinary duties as such, he also acts as port warden, and makes survey of ships and cargoes, for which service he is authorized to collect the sum of $10 from ships requiring a hatch survey, and $30 for full survey of ship and cargo.

STEVEDORING CHARGES.

Discharging.

Ballast,	35c.	per ton of	2240 lbs.
Coal, cement and pig iron,	40c.	"	"	"
General merchandise,	40c.	"	"	"
Bricks and tiling,	50c.	"	"	"
Railroad iron,	50c.	"	"	"
Coke,	60c.	"	"	"
Glass,	45c.	"	"	"

Loading.

Wheat or flour, ...	35c. per ton of 2240 lbs.
Salmon, ...	45c. " " "
Lumber and spars, ...	Port rates.

Work to be done to entire satisfaction of Masters and Surveyors.

TOWAGE.

Tacoma to or from sea:

Vessel	from	500	to	700	tons,	....	....	$250
"	"	700	"	1000	"	....	....	 275
"	"	1000	"	1200	"	....	....	300
"	"	1200	"	1500	"	....	....	 325
"	"	1500	"	1800	"	....	....	350
"	"	1800	"	2000	"	....	....	 375
"	"	2000	"	2500	"	....	....	400

Vessels under 500 tons subject to special rates. Docking vessels, $25. Hawser to or from sea, $10. Captains to wire agent of tugs forty-eight hours' notice of when tug is required.

PILOTAGE, WHARFAGE.—None.

DRY DOCK.

Capable of receiving largest sailing vessels afloat. Foundry, machine and boiler shops owned by same company. Rates at present are as follows:

For Steamers, on Gross Tonnage.

	FIRST DAY.	LAY DAYS.
From 100 to 1000 tons	50c. per ton.	25c. per ton.
" 1000 " 2000 "	40c. "	20c. "
" 2000 " 3000 "	30c. "	20c. "

" 3000 tons and upwards, 20 cents per ton per day.

For Sailing Vessels, on Net Tonnage.

100 tons, ... $50 per day.

	FIRST DAY.	LAY DAYS.
From 100 to 500 tons	50c. per ton.	25c. per ton.
" 500 " 1000 "	40c. "	20c. "
" 1000 " 2000 "	$400.	20c. "
Over 2000 tons	20c. "	20c. "

Cargoes charged for at same rate as tonnage.
No charge for ballast.

Pro forma disbursements of a 2650-ton register ship, at Tacoma:

To Towage from and to sea	$900 00
" Consul's fees	9 90
" Custom House, inwards	2 00
" " " outwards	2 70
" Stevedores discharging ballast and loading wheat	1,387 25
" Lining ship, lumber, etc	450 00
" Marine Surveyor	30 00
" Harbor Master, use of buoy	10 00
" Supplies	502 05
" Flour and water	42 00
" Butchers	272 99
" Burlap for lining ship	56 22
" Butchers	108 00
" Health Officer	5 00
	$3,778 11

The above represents expenses of one of largest ships loading grain at Tacoma.

COAL AND LUMBER PORTS

—OF—

VANCOUVER ISLAND AND BURRARD INLET,

BRITISH COLUMBIA.

VESSELS proceeding to above ports, or calling for orders, go to Royal Roads, Port Angeles or Port Townsend.

Victoria, the leading city of Vancouver Island, is situated sixty miles east of Cape Flattery, with a population of 40,000. Principal shipping consists of vessels with general cargoes from Europe, and exportations of salmon and lumber. Vessels of any draft can load at the outer wharf, situated outside of the entrance of the harbor, but perfectly safe for vessels to lay alongside. The harbor itself is practically accessible only to vessels drawing not over 18 feet of water.

Esquimalt Harbor, four miles from Victoria, is the British naval station. Its harbor is equal to any in the northwest, and perfectly capable of accommodating a large fleet of vessels. It has a graving dock capable of admitting any size vessels afloat.

Nanaimo, Departure Bay and **Comox** are coal shipping ports north of Victoria.

Cowitchan, 40 miles north of Victoria, and **Chemainus,** 60 miles north of Victoria, are lumber shipping ports.

BURRARD INLET.

Vancouver, the leading city of British Columbia, is situated on Coal Harbor, 150 miles from Cape Flattery, and has a population of 50,000. It is the terminus of the Canadian Pacific Railway, also of regular line of steamers to China. It is the port of entry for Burrard Inlet.

Hastings Mills and **Moodyville** are located here, the former adjoining the city, and the latter directly across the Inlet. Vessels of largest tonnage can load at either of these mills, with plenty of water alongside wharves. Ballast grounds are close to mills.

List of Ordinary Disbursements for Vessels Loading at Hastings Mills.

Port Agency	$25 00
Survey for insurance	25 00
Hospital dues, per register ton	02
Harbor dues	5 00
Bill of Health	1 00
Pilotage, each way:—	
If services of pilot are employed, per foot	3 00
If services of pilot are declined, per foot	2 00
Gulf pilotage, optional, per foot	1 00
Discharge of ballast, generally done by crew.	
Harbor towage from ballast grounds and docking,	$10.00 to 20 00
Stevedoring, per M. (according to style of cargo and the facilities of ship for taking cargo)	80c. to 1 15
Water	$15.00 to 20 00

Towage from Royal Roads or Port Angeles to mill and to sea, when loaded:

Vessels from	500 to	700 tons	... ...	$350
" "	700 "	1000 "	... ...	400
" "	1000 "	1200 "	... ...	450
" "	1200 "	1500 "	... ...	500
" "	1500 "	1800 "	... ...	550
" "	1800 "	2000 "	... ...	600
" "	2000 "	2500 "	. . ...	650

The following are actual accounts:

	REGISTER.	CARGO.	DISBURSEMENTS.
British Ship ...	... 2108 ...	1,974,050 feet lumber ...	$4,955 49
British Ship ...	1128	786,228 " "	2,834 39
American Ship ...	1272 ...	983,853 " " ...	3,305 80
American Sch'r ...	776 ...	1,000,000 " "	3,001 25

New Westminster, on Frazer River, 20 miles from its mouth and 10 miles distant from Vancouver, is the leading salmon canning port in British Columbia, and also exports lumber. Vessels drawing 20 feet of water can safely proceed in and out.

BRITISH COLUMBIA PORT CHARGES.

Bill of health, ...	$4 00
Harbor dues, ...	1 50
Sick Mariners' Fund, per ton, ...	02
Usual tonnage dues.	

PILOTAGE.

Not compulsory. Taking vessel to or from Royal Roads, if pilot is employed, the rate not to exceed $3 per

foot. For vessels entering or clearing from the undermentioned ports the following will be charged:

Esquimalt Harbor, per foot, ...	$3 00
Victoria, per foot, under 10 feet draft, ...	3 00
" " 10 feet draft and over, ...	4 00
Nanaimo and Departure Bay, per foot, ...	4 00
Burrard Inlet, per foot, ...	4 00
Bayne's Sound, per foot, ...	4 00
New Westminster, rates subject to agreement, but not to exceed $6 per foot.	

All vessels under steam, or in tow of steamers, will be charged one-fourth less than the above rates.

One-half of the above rates will be charged if vessel is spoken and services of a pilot not accepted.

Vessels calling at Royal Roads for orders are compelled to enter at once.

Stevedoring charges practically the same as at Puget Sound.

TOWAGE.

By British Columbia tug-boats from Cape Flattery to Nanaimo, Burrard Inlet or New Westminster, and back to Cape Flattery:

Vessels	700 to	800 tons, ...		$550
"	800 "	900 "		575
"	900 "	1000 "		625
"	1000 "	1200 "		675
"	1200 "	1500 "		750
"	1500 "	2200 "		800

From Race Rocks, Esquimalt, Victoria Harbor or Port Angeles to above ports and back, $200 less than above rates

Use of tug's hawser, $20 for the round.

NANAIMO.

NANAIMO.

ON the East Coast of Vancouver Island is the most important coal shipping port on the Pacific Coast. Distance from San Francisco, 750 miles. In Nanaimo harbor are situated the loading wharves of the New Vancouver Coal Mining & Land Co., Limited, the same Company also having loading wharves in the adjoining harbor of Departure Bay, Nanaimo being the port of entry for both these harbors. Vessels of greatest draft of water can enter and leave these harbors at any stage of the tide. Facilities for loading and fueling equal to the best coaling ports in the world—steamers carrying 4800 tons having loaded full cargo and fuel at Nanaimo in three days. Capacity of Nanaimo Mines, 3000 tons coal per day.

The town of Nanaimo contains 6000 inhabitants.

These collieries are the oldest on this coast, the Vancouver Coal Mining and Land Co. having mined at Nanaimo over thirty years.

Foreign shipments of coal for 1893 were:

From Nanaimo, ...	348,696 tons.
From Departure Bay, ...	256,240 "
Total, ...	604,936 "

principally to San Francisco, San Diego, San Pedro, Port Los Angeles, Hawaiian Islands and Alaska.

Vessels seeking can call at Port Angeles, Port Townend or Royal Roads, and by telegraphing to San Francisco can always obtain a charter for coal.

Disbursement account of a sailing vessel, 1436 tons register, in ballast from San Francisco to Nanaimo, and thence to San Francisco with 2248 tons coal.

Outward San Francisco Disbursements:

Custom House clearance and brokerage	$5 70
Outward towage to sea	60 00
Wharfage, two days while ballasting	13 30
300 tons ballast	210 00
One-half outward pilotage	49 97

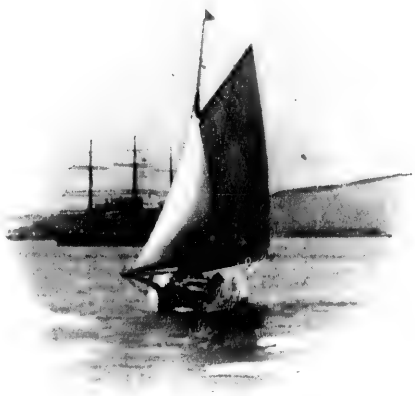
Disbursements at Nanaimo:

Labor	24 00
Sick Mariners' dues	28 75
Trimming coal	130 55
Clearance	1 00
One-half inward and outward pilotage	23 50
Coal Surveyor's certificate	5 00
Towage to Nanaimo and return	580 00

San Francisco Inward Disbursements:

Inward towage and dockage at wharf	75 00
Custom House entry and brokerage	8 50
Tonnage dues	43 10
Labor	6 40
Quarantine fee	7 50
One-half inward pilotage	77 47
Wharfage, seven days	92 75
Discharging 2247 $\frac{1}{2}\frac{1}{2}\frac{1}{4}\frac{1}{8}$ tons coal	674 26
	$2,116 75

It should be remarked that the usual charge for Nanaimo towage is $100 more than paid by the vessel in within disbursement account, she having sailed into Port Angeles.



HONOLULU.

HONOLULU.

SITUATED on the Island of Oahu; is the capital and principal port of the Hawaiian Islands group. It possesses a safe harbor, and has excellent wharves and storage facilities. The Oceanic Steamship Company provide a direct monthly steamship service with San Francisco, and their Australia, New Zealand and San Francisco line of steamers make monthly calls.

Honolulu harbor is entered through a channel 200 feet wide and 30 feet deep at mean low water, which has been cut through the bar.

The center line of this channel bears N. 26° 42′ E. true. The line of the harbor light (red) and the inner light (green) bears N. 25° 20′ E. true, and just touches the last side of this channel at the outer end. The line of the harbor light (red), and the clock-tower of the Honolulu Planing Mill on Fort Street, bears N. 28° 30′ E., and just touches the west side of this channel at the outer end.

The harbor has been dredged to a depth of 28 feet at mean low water for a length of over 500 feet along the Pacific Mail Dock.

PILOT REGULATIONS.

Pilots before boarding a vessel must first be assured that no contagious disease exists on board. Being satisfied in regard to this, the pilot presents a certificate of health for the master to sign; if signed, a white flag is hoisted at the main; if not signed, the vessel is placed in quarantine. Misrepresentation on the part of the master renders the vessel liable to seizure, confiscation and sale.

If any vessel engaged in foreign trade enters or departs without a pilot, such vessel shall be liable for one-half pilotage.

No pilot shall take out any vessel that may be under attachment or arrest by virtue of any process, nor before she has obtained her clearance.

All vessels anchoring outside the reef shall, if so requested by Harbor Master or pilot, change their anchorage as may be directed.

The pilot's fees and health fees must be paid to the Collector of the Port before a clearance can be granted.

It is the duty of the pilot to deliver to the master of any vessel he may board a copy of the Quarantine Regulations.

PILOT'S FEES.

Piloting in or out of the port:

All mail steamers of 1000 tons and upwards, ...	$50 00
Transient steamers, ...	75 00
War vessels, per foot on draught of water, ...	2 00
Sailing vessels under 200 tons register, per foot, ...	1 50
Other vessels and steamers, per ton, ...	05
For anchoring vessels outside, ...	20 00
(If brought into the harbor this charge shall be reduced to $10.)	
Any detention on board for more than twenty-four hours, per day, ...	7 00

HEALTH OFFICER'S CHARGES.

Boarding vessel outside of harbor, ...	$25 00
" " at anchor in harbor, ...	15 00
" " alongside of wharf, ...	10 00

HARBOR REGULATIONS.

The Harbor Master has authority over the anchoring, mooring and making fast of all hulks, coasters, boats and other craft in the harbor, and charged in general with the enforcement of all harbor regulations. Heavy penalties are imposed for disregard.

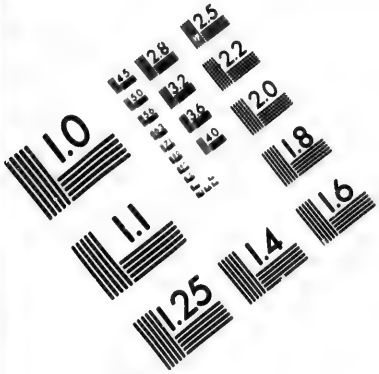
He shall be entitled to receive, in addition to his usual fees, all amounts disbursed by him for the use of boats, warps and labor in mooring and making fast any vessel, and if necessarily detained on board more than two hours at any one time, he shall be paid at the rate of one dollar per hour for such extra detention.

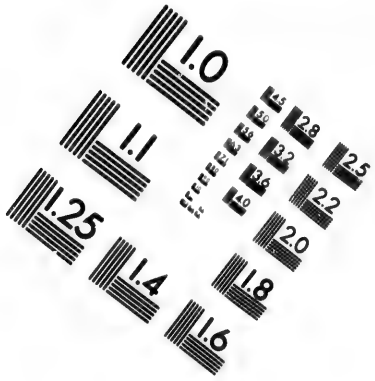
All vessels that may enter any port shall be anchored in the place designated by the Harbor Master, and moved from one anchorage to another as he may direct; and no vessel, excepting coasting vessels under fifty tons burthen, and vessels about to leave the harbor, shall quit her anchorage or moorings until the commanding officer shall have received the written permission of the Harbor Master.

The Harbor Master, or any pilot, while removing a vessel from one anchorage to another, may make fast to any other vessel, or to any warp or wharf.

To facilitate the removing and placing of vessels in their proper berths, all vessels in the harbor shall, when requested by the Harbor Master or any pilot, slack down their stream cables and other fastenings and also their bower chains.

All vessels entering port shall, if so requested by the Harbor Master or any pilot, rig in their jib, flying jib and spanker booms and spritsail yards, and top their lower and topsail yards, within twenty-four hours after anchoring in such port; and in all cases before attempting to





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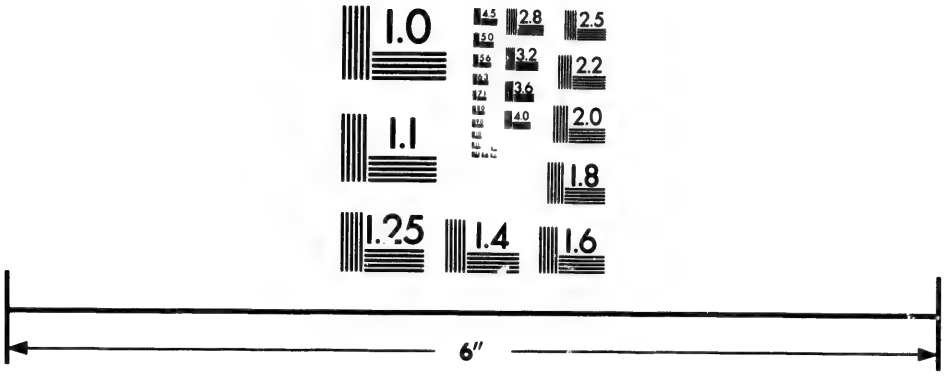

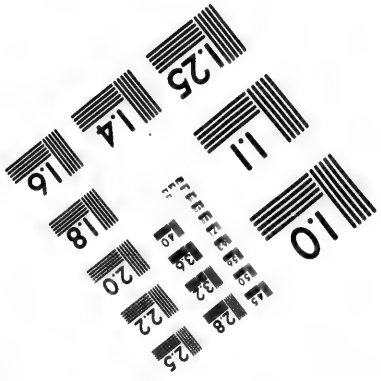

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WEBSTER, N.Y. 14580
(716) 872-4503

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come alongside of, or make fast to, either of the docks or wharves, and keep them so rigged in and topped until within twenty-four hours before leaving the harbor, and until after removing from any wharf or dock.

No combustible material, such as pitch, tar, rosin or oil, shall be heated on board any vessel within the harbor of Honolulu; but all such combustible articles shall be heated either on shore or in a boat, or on a raft at a reasonable distance from the vessel, of which distance the Harbor Master shall be the judge.

No stones or other rubbish shall be thrown from any vessel into the harbor.

Every vessel taking on board or discharging any ballast or coals within the harbor of Honolulu, shall have a tarpaulin properly stretched and spread, so as to prevent any from falling into the water.

HARBOR MASTER'S CHARGES.

Wharfage.

	PER DAY.
Per registered ton (Sundays and Government holidays not counted), ...	$0 02

Storage.

Bricks, coal, coolers, kettles, stone ballast, sand (space of 32 square feet measurement), ...	01
Oil, on wharves, for every 10 bbls., ...	01
Lumber, firewood (space of 32 square feet measurement),	01
Anchor, chains, pig, ballast and old iron, per ton of 2000 lbs, ...	00½

Fees.

Boarding vessel on arrival, ...	3 00
" " on departure, ...	3 00
Moving vessel, each time, ...	3 00

CUSTOM HOUSE.

Complete manifest of the cargo must be delivered to the Collector of the Port immediately after arrival. Said manifest must contain an account of all packages, with their marks, numbers, contents and quantities; also the names of importers or consignees and shippers. Passenger and store lists must also be furnished to the Collector. Any deviation from this rule, or any goods found on the vessel unmanifested, renders the vessel liable for heavy penalties, which are strictly enforced.

Charges.

For visit of health officer	$——
" bill of health on departure	1 00
" pilot and boarding officer	——
" buoys	2 00
" lights, foreign vessels	3 00
" mail oath	1 00
" manifests (blank $1 00, filing fee $1 00)	2 00
" entries (blank $1 00, filing fee 50c.)	1 50
" permits (to accompany entry)	1 00
" bond to secure payment of duties (blank $1 00, filing fee $1 00)	2 00
" bond to produce Consular certificate when delinquent	2 00
" passport	1 00
" passport protest	3 00
" hospital tax (passenger)	1 00
" hospital tax (Hawaiian vessels), each seaman per month	25
" every stamped blank or certificate furnished by the Collector	1 00

The Custom House charges for all other acts and duties not expressly provided by law shall be such as may from time to time be prescribed by the Minister of Finance.

TOWAGE.

Vessels under 200 tons,	...	...	...	...	...	...					$30 00
" between	200	and	300	tons,	...	...	...				35 00
" "	300	"	500	"	...	...	..	...			40 00
" "	500	"	800	"	...	...	...				45 00
" "	800	"	1000	"	...	...	...	...			50 00
" "	1000	"	1200	"	...	...	...				60 00
" "	1200	"	1400	"	...	...	...	...			75 00

" of over 1400 tons, five cents per ton, registered tonnage, over and above 1400 tons, in addition.

Towage outside of pilot limits as per agreement.

Towage in cases of accident or wreck as per agreement.

GENERAL CHARGES.

WEIGHING.—10c. per ton.

CARTERS.—30c. to 50c. per ton, according to distance.

STEVEDORES.—$5 per day.

LA ERS.—25c. per hour; overtime, double rates.

SUR EYING.—First survey, three men, $16 each; second survey, three men, $8 each. Bureau Veritas, same rates as San Francisco.

DRY DOCK.—Steam, 50c. per ton, first day; for each additional day, 25c. per ton registered tonnage. Sail, 40c. per day, first day; for each additional day, 20c. per ton registered tonnage. Carpenters and caulkers, $5.50 per day; common laborers, $2.50 per day.

CLERK HIRE.—$4 per day.

WATER RATES.—½c. per gallon delivered on board at wharfside.

WHARFAGE.—2c. per registered ton per day.

The following is the account of a bark carrying about 700 tons general merchandise from San Francisco to Honolulu, at $3 per ton and primage 5 per cent. added, and with a return freight of sugar and rice, at $4 per ton of 2000 lbs. and primage 5 per cent. added; in port 16 days:

Bark ———— and Owners, San Francisco, Cal., in acct. with ————, Honolulu, H. I.

DEBIT.

To paid Tug bill, towing in		$45 00
" Captain		100 00
" Engine bill, discharging		37 50
" Captain		100 00
" Grocer's bill, stores		23 50
" Harbor Master bill, wharfage, etc		45 75
" Police bill, search		3 00
" Butcher bill, beef, etc		33 50
" Sundry extra labor on cargo		32 75
" Clerk hire, discharging, etc		16 00
" Water bill, 2000 gals		10 00
" Damage bill to freight		7 75
" Ice " 200 lbs		2 00
" Washing " 150 pieces at 3c		4 50
" Groceries " sundries		21 75
" Chandlery bill, rope and blocks		12 25
" Repairs " iron work		7 50
" Custom-house bill, pilotage and dues		55 00
" Captain		75 00
" Com'n on inward cargo, 2½ per cent.,	$2057 75	51 44
" " " outward " 5 "	2890 00	144 50
Balance to credit owner's account		1,599 81
		$2,428 50

PER CONTRA CREDIT.

By amount Freight list	$2,257 75	
" " Honolulu wharfage returned	170 75	
		$2,428 50

The following is the account of a bark carrying 1350 tons of Australian coal to Honolulu, and leaving in ballast; in port 25 days:

DEBIT.

To paid Tug bill, towing in		$50 00
" Captain		150 00
" Engine bill, discharging		202 75
" Water " 2500 gals		12 50
" Harbor Master bill, wharfage, etc		312 50
" Blacksmith " repairs		15 75
" Hardware " shovels, etc		21 50
" Doctor's " medicine, etc		16 75
" 400 tons ballast @ $1 00 alongside		400 00
" Extra labor, stowing ballast		100 00
" Butcher bill, beef, etc		125 00
" Police " search		3 00
" Captain		175 00
" Custom-house bill, pilotage and dues		109 00
" Washing " 206 pieces at 3c		6 18
" Chandlery " rope, etc		75 75
" Consul's " health		2 50
" Grocery " sundries		115 75
" Port Agency fee		25 00
" Commissions on inward freight @ 2½ per cent		105 30
		$2,024 23

San Pedro, Redondo, Port Los Angeles.

PORTS of entry for Los Angeles are open roadsteads, where vessels would be unsafe at certain seasons of the year. Cargoes are lightered at San Pedro. At the other points vessels lay alongside wharves when weather permits. The wharf at Port Los Angeles extends a long distance beyond surf-line, and a tug-boat is in attendance to assist vessels away from the wharf if danger threatens. Expenses about same as at San Diego.

J. D. SPRECKELS,
PRESIDENT.

E. S. BABCOCK, JR.,
VICE-PRESIDENT.

CHAS. T. HINDE,
MANAGER.

SPRECKELS BROS.'

COMMERCIAL COMPANY,

SAN DIEGO, CAL.

Shipping and Commission Agents.

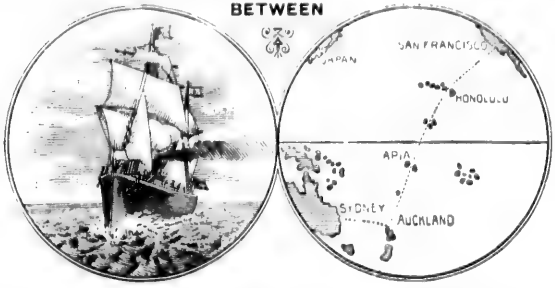
GENERAL IMPORTERS.

Oceanic Steamship Co.

(SPRECKELS' LINE)

..DIRECT MAIL SERVICE..

BETWEEN



SAN FRANCISCO, HONOLULU, APIA, AUCKLAND AND SYDNEY,

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Connection at Auckland with Steamers of the Union Steamship Company of New Zealand for all NEW ZEALAND PORTS, and at Sydney with Railroad and Steamers for MELBOURNE and all AUSTRALIAN PORTS.

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GENERAL AGENTS,

Passenger and Ticket Office, 138 Montgomery Street.
General Offices, 327 Market St. Company's Wharf, foot of Folsom St.

SAN FRANCISCO, CAL.

The Union Insurance Society of Canton, LIMITED.

HEAD OFFICE,
HONGKONG.

SUBSCRIBED CAPITAL,	$2,500,000
PAID UP IN CASH,	250,000
CASH ASSETS, January 1st, 1894,	2,985,236
SURPLUS TO POLICY-HOLDERS,	1,740,633

Insures Merchandise, Freight, Treasure, etc., to and from all Ports and Places in the World.

POLICIES MADE PAYABLE, IN CASE OF LOSS, AT ITS VARIOUS AGENCIES.....

An interim BONUS OF TWENTY PER CENT. (20) Paid to Policy-Holders on Net Premiums contributed during the year 1888.

STANDARD MARINE INSURANCE COMPANY... Limited,

...of Liverpool, England...

SUBSCRIBED CAPITAL,	$2,500,000
PAID UP IN CASH,	500,000
CASH ASSETS, January 1st, 1894,	2,040,214
SURPLUS TO POLICY-HOLDERS,	1,679,267

Policies Issued on Merchandise, Freight, Treasure, etc., to and from all Ports and Places in the World.

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CLAUS SPRECKELS, VICE-PRESIDENT

W. M. GIFFORD, SECRETARY AND TREASURER
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HONOLULU, H. I.

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Only Steel and Iron Shipbuilding Plant on the Pacific Coast.

BUILDERS of

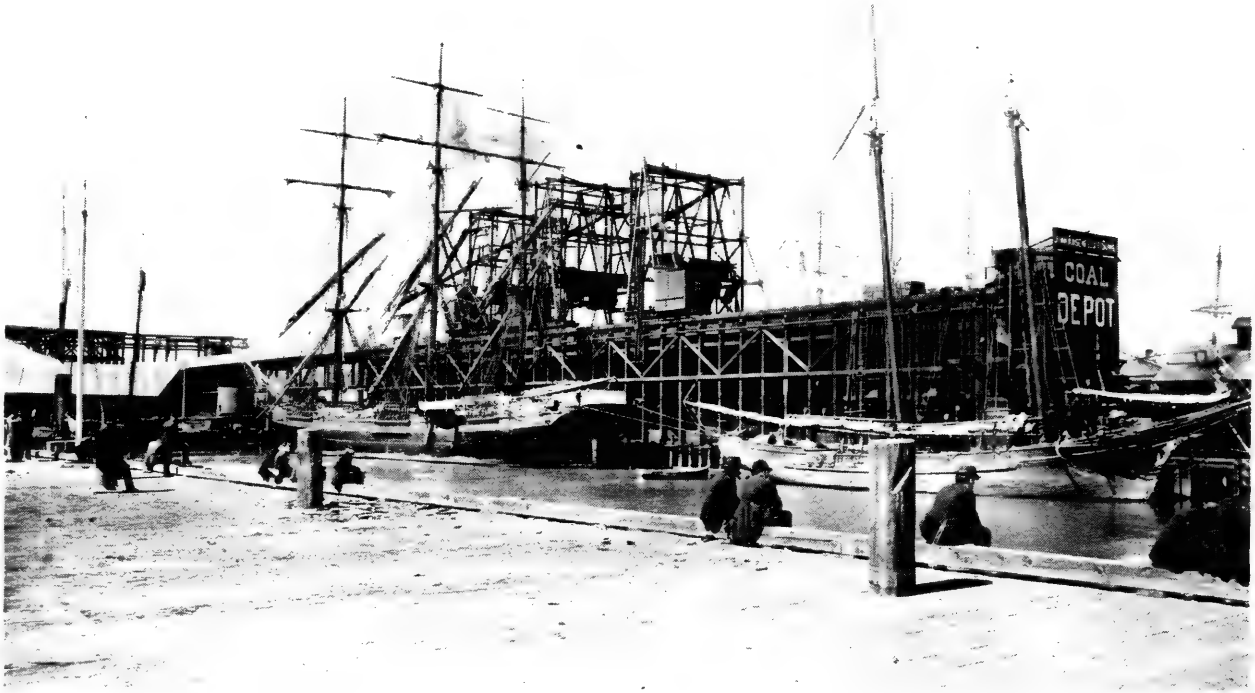
U. S. CRUISER, CHARLESTON, 4040 tons register.
U. S. CRUISER, SAN FRANCISCO, 4080 tons register.
U. S. CRUISER, OLYMPIA, 5500 tons register.
U. S. COAST DEFENSE, MONTEREY, 4048 tons register.
U. S. BATTLE SHIP, OREGON, 10,200 tons register.

P. M. S. S., PERU, 3528 tons register.
P. C. S. S., POMONA, 1264 tons register.
O. C. & N., ARAGO, 828 tons register.

TUG, FEARLESS, 400 tons register.
TUG, ACTIVE, 174 tons register.
TUG, COLLIS, 206 tons register.

Hull and Machinery Repairs

Of all kinds promptly attended to without charge for wharfage.



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The New Vancouver . Coal Mining . . and Land Co.

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Anti-Fouling Composition.

THE MOST EFFECTIVE
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**Supplied to the Leading
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at Home and Abroad.**

= = The Best Preservative

Against Rust, Grass and Barnacles.
Always Ready for Use.
No Warming or Mixing.
Dries Within an Hour, with a coating of Enamel, thereby reducing Surface Friction to a Minimum.

Messrs. Holzapfel's Compositions are used by nearly all the principal shipowners and Governments in the World.

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Newcastle-Upon-Tyne, and at
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. ORE BREAKERS
. ORE FEEDERS. ETC.

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. . . . . PROMPTLY ATTENDED TO

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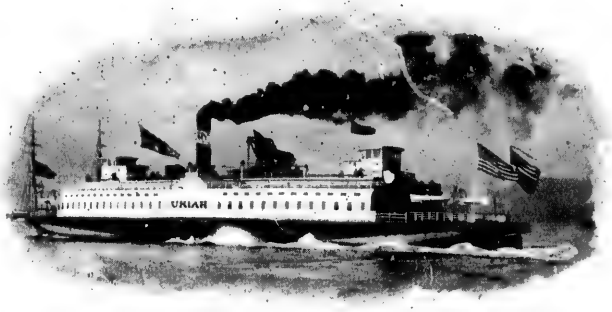

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MINING AND MILLING MACHINERY
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SALT MEAT WARRANTED.....

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416 BATTERY STREET, - - - SAN FRANCISCO

Groceries	Chandlery
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Canned Goods	Paints and Oils
Potatoes	Lamps, etc.
Vegetables	Hardware
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Furnished at Lowest Market Rates

All Correspondence addressed to our care will be promptly delivered on arrival of vessel.

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STEVEDORES

512 and 514

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Ship Captains : :
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CREW BREAD, FLOUR,
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